Valley Water

Capital Improvement Program

FY 2020-24

Santa Clara Valley Water District

Fiscal Years 2020-24
Capital Improvement Program

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May 14, 2019

Valley Water
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Overview

Overview

OVERVIEW

The Santa Clara Valley Water District's (District) Fiscal Year 2020-24 Five-Year Capital Improvement Program (CIP) is a projection of the District's capital funding for planned capital projects from Fiscal Year 2019-20 through Fiscal Year 2023-24. The purpose of the CIP is to document planned District projects to help integrate District work with the larger community by aligning District planning with other local agency planning efforts.

The District's CIP is developed following the guidelines of Government Code (GC) § 65403 which governs the development and annual review of Capital Improvement Programs developed by special districts in the State of California. State law requires that the program be reviewed and updated annually. It also requires circulation of the document to all agencies having land use authority within District boundaries prior to adoption of the program. This document is intended to provide the information necessary to facilitate planning and construction of water related infrastructure to meet the needs of Santa Clara County.

Mission

SANTA CLARA VALLEY WATER

The mission of Valley Water is to provide Silicon Valley safe, clean water for a healthy life, environment, and economy.

The CIP is prepared in accordance with the guidelines established by the Government Finance Officer Association (GFOA). Capital projects in this document are defined by both the accounting criteria for capital investment and Public Contract Code definition of public works. They exceed $50,000 in cost, have long-term life spans and are generally nonrecurring. They usually fall within one of the following six categories:

1. Acquisition of land for public purpose;
2. Construction of a significant facility, i.e. a flood protection facility, a water treatment facility, or a building;
3. Addition to or expansion of an existing facility;
4. Nonrecurring rehabilitation or major repair to all or part of a facility provided the total cost is more than $50,000;
5. Specific planning, engineering study, or design work related to an individual project which falls within the above categories;
6. Significant one-time investment in tangible goods of any nature, the benefit of which will accrue over several years. Examples include items such as large initial investments or improvements in technology or the purchase of a new telephone system.

The CIP includes several Small Capital Improvement Projects in the various cost centers. These projects will be ongoing and will be used to fund multiple small projects to undertake repairs, replacements, and minor modifications to existing water utility, watershed or campus facilities. Small Capital Improvements generally meet the following criteria:

1. Project cost is less than $2.5 million;
2. Project can be completed within 2 fiscal years;
3. Rights-of-Way acquisition is not required.

The proposed funding for the Water Supply Small Capital Improvement projects is anticipated to vary each year based on the work identified in the Water Utility Asset Management Plan. The Almaden Campus Small Capital Improvements project is funded at a flat rate each year. Unspent funds in these projects will not carry forward from previous years.

There are some miscellaneous capital expenditures incurred by the District that are not captured in the CIP. These capital expenditures include certain components of water purchases, indirect costs to manage and train staff that are fully engaged in capital work, and routine replacement of vehicles and large equipment.

ALIGNMENT WITH ENDS POLICIES

The District plans, manages and carries out capital improvements to comply with the Ends Policies and Executive Limitations established by its Board of Directors. Under the District's Policy Governance Model, Ends Policies describe the outcomes or results to be achieved by District staff. Balancing the Ends Policies are the Executive Limitations, which set limits on staff activities in fulfilling the Ends.

Program plans, master plans and the asset management plan are developed to achieve the results established by the Ends Policies and to further define the goals and objectives of each Ends Policy. The Board either formally approves the plans or provides direction to staff, confirming the goals and objectives. These plans then become the basis for staff to propose and develop individual capital projects. Project ideas that are proposed by Operations staff must be vetted via a feasibility study and then validated to prepare a business case for proceeding with a capital investment. Some high profile feasibility studies are included in the CIP. Alignment of the CIP with program or master plans provides a direct link to Ends Policies and ensures the District's long-term capital investments are planned and executed according to the Board's priorities. Three Ends Policies directly drive program or master plans and the types of capital improvements described in the CIP:

- Ends Policy E-2 "There is a reliable, clean water supply for current and future generations."
- Ends Policy E-3 "There is a healthy and safe environment for residents, businesses and visitors, as well as for future generations."
  - E-3.1 "Provide natural flood protection for residents, businesses, and visitors"
  - E-3.2 "Reduce potential for flood damages"
- Ends Policy E-4 "There is water resources stewardship to protect and enhance watersheds and natural resources and to improve the quality of life in Santa Clara County."

(See flowchart "CIP Process Alignment with Ends Policies" on page I-5)

CIP PLANNING PROCESS

The District conducts an annual planning process for its Capital Improvement Program. The purpose of the planning process is to ensure the capital projects included in the CIP:

- Meet the Board's priorities and contribute to the objectives of the District's various programs;
- Have identified funding for the duration of the projects;
- Are coordinated with the local jurisdiction's General Plans.

The CIP planning process is carried out in accordance with the following Executive Limitations:

- Executive Limitation EL-4.3.1., "A BAO shall produce an annual Rolling Five-Year Capital Improvement Plan with the first year serving as the adopted capital budget and the remaining years in place as a projected capital funding plan."
- Executive Limitation EL-4.4.1., "A BAO shall demonstrate to the Board the planned expenditures for the identified and selected capital projects in the Rolling Five-Year Capital Improvement Plan are alligned with the Board's capital priorities."

The annual CIP process is the responsibility of the CIP Group comprised of division managers, with the responsibility to initiate or implement capital projects. The detailed process is a documented ISO procedure. It includes the following key steps:

- Management review and approval, to ensure staff proposed projects are aligned with Board policies and approved program plans;
- Validation of projects to ensure there is a business case for doing the project and that a capital investment is the best solution;
- Prioritization of all projects, including continuing and newly proposed projects, to ensure the projects in the CIP reflect Board priorities;
- Financial analysis, to determine the capacity of the District's capital funding sources to fund the proposed capital projects;

- Review of impacts the completed capital project will have on the Operations and Maintenance (O&M) resources.
- Outreach to local jurisdictions with land use authority, within Santa Clara County, to coordinate the District's Capital Improvement Program with their General Plans;
- Board review and direction at appropriate steps, to ensure the CIP reflects Board policies and priorities;
- Board adoption of the CIP plan.

The annual CIP planning process starts with collecting information on proposed new capital projects in July, followed by preliminary scoping, priority and financial analyses to produce a Draft CIP in February. The Draft CIP serves as a multi-year plan, and together with other long-term planning efforts of the District, is the basis for the budget for the following fiscal year. This Draft CIP plan is also reviewed by local jurisdictions for consistency with their General Plans. While the CIP is being reviewed by the cities and County the budget is being reviewed and finalized. The Board concludes the outreach on the CIP with a public hearing. The first year of the CIP is reconciled with the budget and the two documents are presented to the board for formal adoption in May.

Board Direction and CIP Outreach

The Board has many opportunities each year to provide direction on projects contained in the Capital Improvement Program. The CIP is developed in parallel with the budget and the water rates. It is presented to the Board on three separate occasions for review and input. Early in the process the project list is presented to the board so they can provide direction to staff, ensuring that the document is developed in accordance with Board priorities. The direction received is used to develop the Draft CIP which is reviewed by the Board before staff is authorized to release the document for public review. The CIP is adopted by the Board in May following a public hearing.

The CIP Board Committee meets throughout the year to review and discuss information related to the development and implementation of the CIP and provide input to staff. The Committee provides direction on issues ranging from projects they want to implement, to resource utilization and funding sources or distribution. The Committee's recommendations are incorporated into the CIP document or implemented by staff.

On January 8, 2019 the FY 2020-24 Preliminary CIP project list was reviewed and endorsed by the Board. The following are highlights of changes from the previous year that have been approved as the basis for the FY 2020-24 CIP:

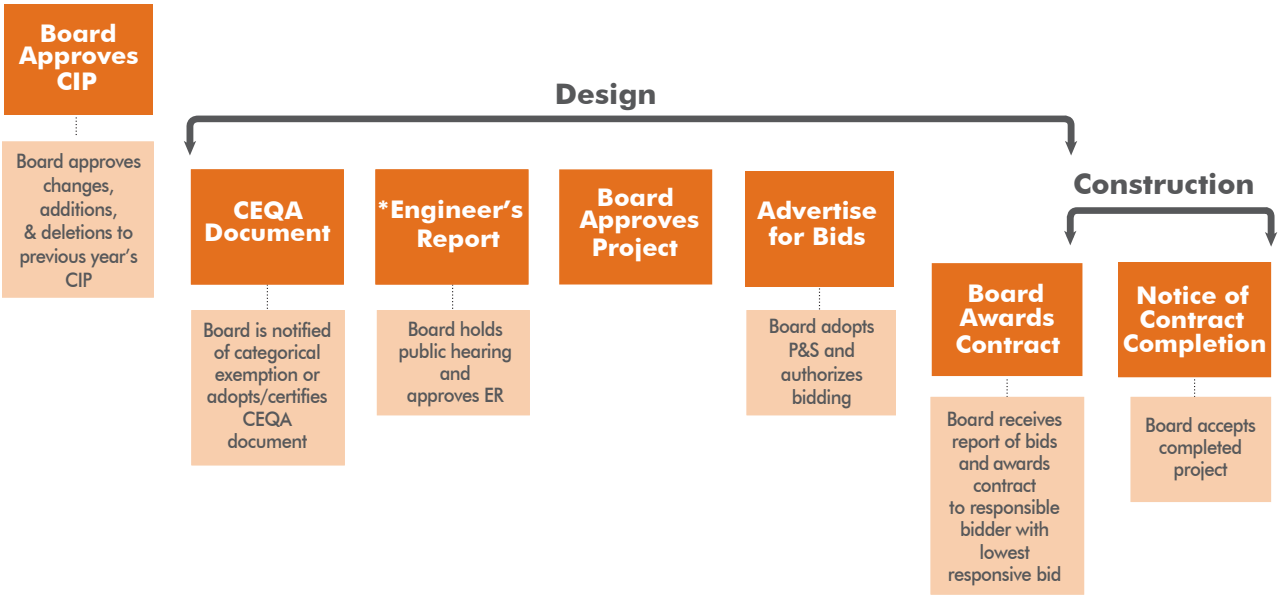
- To fully fund the Water Supply projects in the FY 2020-24 CIP, an increase in the groundwater production charges of up to 6.6% in North County and 6.9% for South County will be required in FY 2020.
- The Pacheco Reservoir Expansion Project with a value of $1.345 billion has been fully incorporated into the CIP. The District has been awarded $485.4 million from the State of California Water Commission's Water Storage Investment Program for this project. This project would provide emergency water storage for the County and would significantly benefit fisheries in Pacheco Creek downstream of the dam.
- Two new Water Supply projects with a combined value of $20 million were added to the CIP. They are; Water Treatment Plant Electrical Improvement Project and Santa Teresa Water Treatment Plant Plant (STWTP) Filter Media Replacement Project.
- One new Flood Protetion project that supports the Safe, Clean Water Program Priority D.6, the Los Gatos Creek Restoration and Flood Protection Project has been added to the CIP with $9M in funding. A potential partnership with Google, Inc. for a flood protection and stream restoration project in the vicinity of the planned downtown San Jose "Google Village." Preliminary discussion indicates that Google, Inc. will provide necessary rights-of-way for the project. Construction cost is estimated to be between $20M and $28M and the Safe, Clean Water Fund will provide approximately $9M to support the project. The remaining funding would have to be secured from other sources.

Overview

- The Guadalupe River, Tasman Drive to I-880 Project was, approved by the Board, for inclusion in the CIP on March 12. This project will evaluate possible options to restore design flow conveyance capacity and present a staff-recommended project for Board consideration. It is estimated that an evaluation report with a staff-recommended project will take 9 to 12 months to complete.
- One new Water Resources Stewardship project, Ogier Ponds Separation from Coyote Creek (Planning and Design only) has been added to the CIP with a project value of $3.2M. The funding for the construction would be contingent on a successful Fish and Aquatic Habitat Collaboration Effort (FAHCE) settlement and a partnership with the County of Santa Clara.
- One new Information Technology project, the Telephone System Voice Internet Protocol with a project value of $1.2M has been added to the CIP. While operational, the current Avaya PBX system needs frequent maintenance.
- A second Information Technology project, the Capital Construction Management System Project was included in the second pass of the Budget. This project will select and implement a new CIP project management software for large complex projects.

Each project in the CIP goes through a planning phase, design phase and construction phase. The Board may determine to not implement a project based on various considerations such as financial constraints, environmental impacts, Operations and Maintenance or community desire during a project's planning or design phases. Approval of a capital project by the Board occurs at the end of the design phase when the Board approves the plans and specifications to solicit bids for construction of the project.

OPPORTUNITIES FOR BOARD DIRECTION ON CAPITAL PROJECTS



** Board approval of the Engineer's Report is required only on projects with zone funding.*

CIP PROCESS ALIGNMENT WITH ENDS POLICIES

Ends Policy E-2
There is a reliable, clean water supply for current and future generations.

→ **Program Plans or Master Plans**
- **1990** SCVWD Action Plan for reducing disinfection by-product (Board approved)
- Integrated Water Resource Plan (Board Work Studies)
- **1999** Producer-Wholesaler Agreement for Supply of Recycled Water between SCRWA and the District (Board approved)
- **2004** Santa Clara Valley Water District Asset Management Program Implementation Plan
- **2005** Urban Water Management Plan (Board approved)
- **2005** Dam Safety Plan
- **2005** Water Infrastructure Reliability Plan
- **2006** South County Water Recycling MasterPlan (Board approved)
- **2012** Safe, Clean Water Program (Board/Voter approved)
- **2012** Water Supply Infrastructure Master Plan (Board approved)
- **2013** Recycled Water Master Plan (City of Sunnyvale)
- **2014** South Bay Water Recycling Strategic Master Plan

→ **FY 2020-2024 CIP**
- **28 - Water Supply Capital Projects**

Ends Policy E-3.1 & E-3.2
Provide natural flood protection for residents, businesses, and visitors. Reduce potential for flood damages.

→ **Program Plans or Master Plans**
- **1982, 1986, 1990** Benefit Assessment Program (Board approved)
- **2000** Clean, Safe Creek Program (Board/Voter approved)
- **2001** Stream Maintenance Program (Board approved) Annual Watershed Facility Inspection Program (for all watersheds)
- Feasibility Cost Sharing Agreements with the US Army Corps of Engineers
- **2012** Safe, Clean Water Program (Board/Voter approved)

→ **FY 2020-2024 CIP**
- **19 - Flood Protection Capital Projects**

Ends Policy E-4
There is water resources stewardship to protect and enhance watersheds and natural resources and to improve the quality of life in Santa Clara County.

→ **Program Plans or Master Plans**
- CEQA commitments
- Regulatory permitting commitments
- Enhancement Program per Clean Safe Creeks Program (Board/Voter approved)
- Enhancement opportunities determined appropriate by the Board
  - Fish and Aquatic Habitat Collaborative Effort
  - Natural Resource Damage Assessment
  - Other
- **2012** Safe, Clean Water Program (Board/Voter approved)

→ **FY 2020-2024 CIP**
- **10 - Water Resources Stewardship Projects**

Strategic Support

→ **Program Plans or Master Plans**
- **1990** Facilities Master Plan - Site Analysis Report (Board approved)
- **2005** Needs Assessment and Plan Feasibility Study
- **2012** Campus Master Plan (Board approved)

→ **FY 2020-2024 CIP**
- **2 - Buildings and Grounds Capital Projects**

Strategic Support

→ **Program Plans or Master Plans**
- **2001** Information System Master Plan
- **2003** Enterprise-wide Master Communication Plan
- **2012** Information Systems Master Plan

→ **FY 2020-2024 CIP**
- **8 - Information Technology Capital Projects**

CIP Prioritization and Financial Analyses

FISCAL YEAR 2020-24 CIP SUMMARY

The recommended CIP for FY 2020-24 includes 67 priority projects to implement the goals and objectives of the District's program plans and master plans. These projects are grouped into five types of improvements:

- *Water Supply Capital Improvements*
  28 projects contributing to Ends Policy E-2
- *Flood Protection Capital Improvements*
  19 projects contributing to Ends Policy E-3
- *Water Resources Stewardship Capital Improvements*
  10 projects contributing to Ends Policy E-4
- *Buildings and Grounds Capital Improvements*
  2 projects supporting District efforts to achieve the Ends Policies
- *Information Technology Capital Improvements*
  8 projects supporting District efforts to achieve the Ends Policies

Each of the 67 projects in the CIP has an identified funding source based on the type of improvement or function of the project.

The principal sources of revenue for the District are property taxes, a special parcel tax and water production charges for use of groundwater, treated water, and surface water. These revenues are organized into eight funds. Seven of the eight funds have a specific purpose and only finance the operational and capital expenditures related to that purpose. In 2008 the Board decided to combine the individual watershed funds into a county-wide watershed and stream stewardship fund to send the message that the watershed activities are managed for the benefit of the county. This also streamlines most tracking and accounting activities for staff. The District continues to receive a small amount of revenue from benefit assessments that were approved by voters in the 80s and 90s. These funds are dedicated to specific watersheds and the accounting practices to ensure that they are spent and accounted for appropriately have been kept in place. As shown in the chart below, five of the eight funds are used to finance the five types of capital improvements in the CIP.

In November 2012 the voters overwhelmingly approved the Safe, Clean Water and Natural Flood Protection Program (Safe, Clean Water). This program replaced the Clean, Safe Creeks Program that would sunset in 2016. Safe, Clean Water has an expanded focus that includes funding for important Water Utility projects as well as additional funding for Flood Protection and Water Resources Stewardship projects. The Safe, Clean Water program will provide over $750 million of special parcel tax revenue for operations and capital projects.

The District aggressively pursues external funding to supplement its principal revenue when practical. For a complete listing of grants and partnerships see Appendix C. A number of District projects are receiving substantial State funding through grants:

- $25 million for Lower Silver Creek and Cunningham Flood Detention from DWR;
- $485 million for Pacheco Reservoir from the California Water Commission;
- $30 million Upper Berryessa, Lower Berryessa, and Lower Penitencia from DWR

DISTRICT PRIORITIES	District Funds				
Type of Improvement	Water Utility Enterprise Fund	Watershed Stream Stewardship Fund	General Fund	Safe, Clean Water Fund	Information Technology Fund
Water Supply	●			●	
Flood Protection		●		●	
Water Resources Stewardship	●	●		●	
Buildings and Grounds			●		
Information Technology	●				●

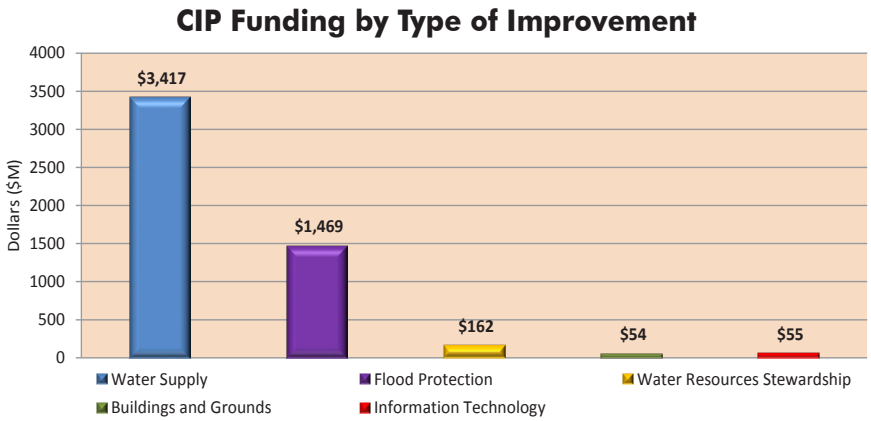
This chart identifies which types of improvement are associated with each of the District's five capital funds.

Overview

The estimated total funding required to implement the 67 projects defined in the CIP is $5.63 billion. The District has been and continues to be successful in leveraging funding for its capital projects through partnerships with federal, state, and local agencies. Of the $5.63 billion total funding, $1.219 billion is expected from the District's various partners, such as the U.S. Army Corps of Engineers (USACE), and $4.415 billion from the District. A list of projects that are funded cooperatively with the District's partners is summarized in Appendix C. Funding from partners for the cooperative capital projects generally come in two ways:

- Funds that are made available by the partners when needed (cost-sharing agreements or in-kind services), or
- Funds that are reimbursed by the partners after the District advances the needed funds.

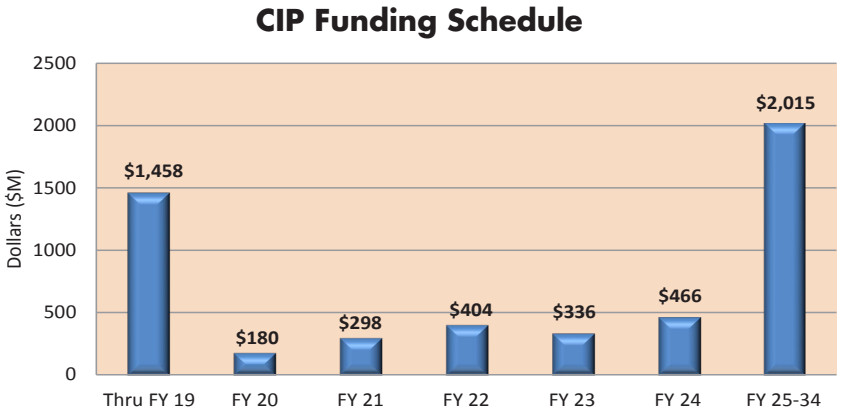
Of the $1.219 billion that is expected from the District's partners, $743 million is advanced by the District and reimbursed later. This $743 million is included in the CIP, and increases the District's total funding requirement from $4.415 billion to $5.158 billion, to ensure that the District has adequate funding to advance the reimbursement.



The chart above shows the distribution by type of improvement, of the $5.158 billion total CIP funding as planned in the FY 2020-24 CIP.

The chart above shows how the $5.158 billion to implement the 67 projects is allocated to each of the five types of improvements.

Of the $5.158 billion in total funding for the 67 projects identified in the CIP, the Board has appropriated $1.458 billion in prior years (through June 30, 2019 the end of Fiscal Year 2018-19). This year's CIP process identified additional funding needs of $3.699 billion to complete the projects in the CIP, with $180 million allocated in Fiscal Year 2019-20 and a total of $3.519 billion proposed for future years. The table shown on page I-8 breaks down the fiscal year total by the five types of improvement and by applicable funding sources.



The chart above shows how the $5.158 billion is distributed by fiscal year.

CIP Funding Schedule by Type of Improvement and Funding Sources ($K)

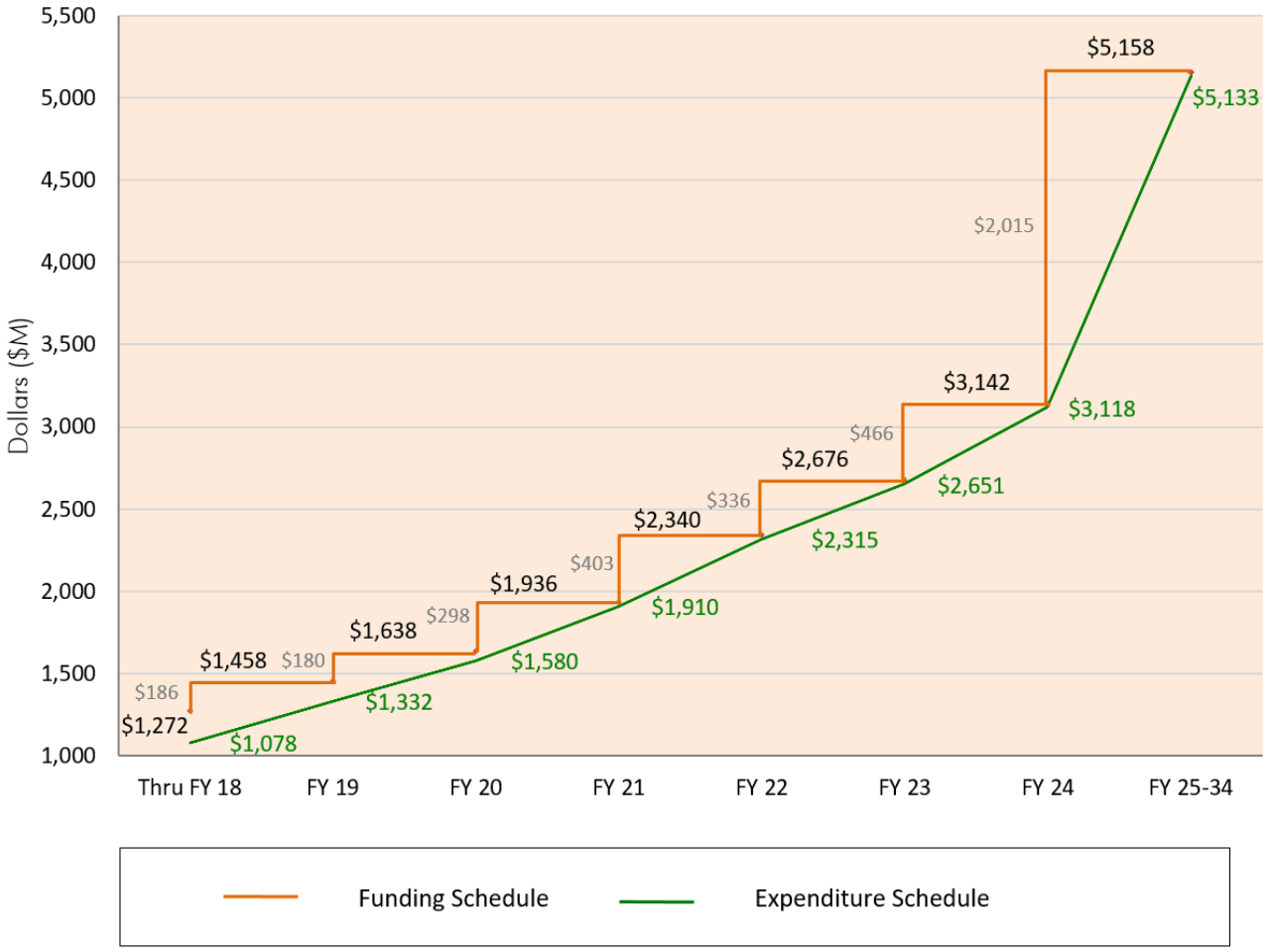
	Through FY18	FY19	FY19 Unspent	FY20	FY21	FY22	FY23	FY24	FY25-34	TOTAL
WATER SUPPLY										
Water Utility Enterprise Fund	402,731	89,127	34,544	92,821	145,769	260,267	195,312	398,351	1,587,454	3,171,832
Safe, Clean Water and Natural Flood Protection Fund	23,989	15,536	-	26,131	20,154	9,851	19,649	5,945	123,891	245,146
Water Supply Total	426,720	104,663	34,544	118,952	165,923	270,118	214,961	404,296	1,711,345	3,416,978
FLOOD PROTECTION										
Watershed Stream Stewardship Fund	361,057	43,021	10,673	28,529	40,046	23,055	38,146	29,178	145,313	708,345
Safe, Clean Water and Natural Flood Protection Fund	428,799	25,998	60,808	24,096	66,983	78,319	52,464	6,385	77,704	760,748
Flood Protection Total	789,856	69,019	71,481	52,625	107,029	101,374	90,610	35,563	223,017	1,469,093
WATER RESOURCES STEWARDSHIP										
Water Utility Enterprise Fund	3,016	2,581	3,623	21	3,833	6,378	3,578	13,549	23,691	56,647
Watershed Stream Stewardship Fund	27,425	1,302	2,293	1,209	9,588	14,157	14,966	6,038	14,594	89,280
Safe, Clean Water and Natural Flood Protection Fund	4,436	1,392	2,075	1,643	1,603	2,127	1,184	218	3,965	16,568
Mitigation Total	34,877	5,275	7,991	2,873	15,024	22,662	19,728	19,805	42,250	162,494
BUILDINGS AND GROUNDS										
General Fund	-	2,572	-	2,063	6,384	8,969	7,028	2,327	24,455	53,798
Buildings and Grounds Total	-	2,572	-	2,063	6,384	8,969	7,028	2,327	24,455	53,798
INFORMATION TECHNOLOGY										
Water Utility Enterprise Fund	2,221	502	-	1,268	-	97	1,519	3,061	4,767	13,435
General Fund	1,199	-	-	-	-	-	-	-	-	1,199
Information Technology Fund	16,673	4,302	10,220	1,956	4,081	491	2,256	1,423	9,394	40,576
Information Technology Total	20,093	4,804	10,220	3,224	4,081	588	3,775	4,484	14,161	55,210
TOTAL	1,271,546	186,333	124,236	179,737	298,441	403,711	336,102	466,475	2,015,228	5,157,573
CUMULATIVE TOTAL	1,271,546	1,457,879		1,637,616	1,936,057	2,339,768	2,675,870	3,142,345	5,157,573	

FY 2018-19 Funds to be reappropriated

Overview

As shown in the table, CIP Funding Schedule by Type of Improvement and Funding Sources (on the previous page): approximately $124 million of the already appropriated $1.457 billion is not spent and is reappropriated to Fiscal Year 2019-20 for continued use in those same projects in amounts consistent with the project expenditure schedule for Fiscal Year 2019-20. The following chart explains the relationship between the CIP funding schedule and expenditure schedule.

CIP Funding Schedule vs. CIP Expenditure Schedule



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Water Supply

Water Supply Capital Improvements

WATER SUPPLY OVERVIEW

The District manages and operates a complex and integrated water supply infrastructure, including storage, transmission, treatment, and recycled water facilities, to meet the Board's Ends Policy E–2, "There is a reliable, clean water supply for current and future generations."

Storage Facilities

- 10 surface reservoirs
- 393 acres of recharge ponds
- 76 miles of in-stream recharge
- Ground water basins

Transmission Facilities

- 142 miles of pipelines
- 3 pump stations

Treatment Facilities

- 3 treatment plants

Recycled Water Facilities

- Silicon Valley Advanced Water Purification Center
- South County Recycled Water Distribution System

Planning, design and construction of the above facilities took decades of effort. Beginning in the 1930s, reservoirs and recharge ponds were built to halt depletion of the ground water basin and subsidence, followed by pipelines and treatment plants to bring in state and federal water to meet growing water demands in the County.

In the early 1990s, the District embarked on new and challenging capital improvements to upgrade its three drinking water treatment plants in order to meet new Environmental Protection Agency rules for improved water quality required by 1996 amendments to the Safe Drinking Water Act. Fifteen years of effort and capital funding brought the upgrades at Penitencia and Santa Teresa Water Treatment Plants to completion. Delivery of ozonated water produced at these two treatment plants began in 2006.

The Rinconada Water Treatment Plant (RWTP) was built in the late 1960s and is reaching the end of its useful life. A number of projects to upgrade and improve operations have been completed. The RWTP Reliability Improvement Project will add raw water ozonation, construct new flocculation and plate settler clarification, and dual media filtration facilities. It will also increase plant capacity from 80 to 100 million gallons per day. Construction of this Project began in the summer 2015, it is a multi-year effort that will be constructed in a phased approach to allow the plant to continue operations throughout the construction process.

With a significant portion of the Water Supply infrastructure approaching fifty to sixty years of age, maintaining and upgrading the existing infrastructure to ensure each facility functions as intended for its useful life became the focus of the Water Supply Capital Improvement Program in recent years, as shown in the CIP.

The District owns and operates ten dams. While these dams provide water supply, flood management, recreation, and environmental flow benefits, there are consequences and costs for dam ownership. Knowledge of seismic stability design and construction was very rudimentary during the design and construction of District dams in the 1930s and 50s. Both liquefaction of dam embankments and foundations and embankment stability must be addressed for seismic stability. Several of the District reservoirs have operating restrictions imposed by the Department of Safety of Dams (DSOD) while an engineering analysis of how the District's dams would perform under a major seismic event is completed and appropriate corrective actions are implemented.

On November 26, 2010, the Board was informed that Anderson Dam will require a seismic retrofit and the operating restriction was increased to 45 feet below the crest of the dam. Since this briefing, the consultant has determind that a magnitude 7.2 Maximum Credible Earthquake on nearby Calaveras Fault could cause a deformation (slumping) of the dam crest by 25 feet. The Anderson Dam Seismic Retrofit Project ($563 million) was initiated in January 2011.

Water Supply Capital Improvements

The District completed a seismic stability evaluation of Almaden, Calero, and Guadalupe Dams in late 2010. Almaden Dam was found to be seismically stable; however both Calero and Guadalupe Dams will require seismic retrofitting to meet DSOD performance criteria. A project was initiated in fiscal year 2013 to address the Calero and Guadalupe Dams retrofit needs. A separate capital project to address outlet and spillway improvements at Almaden Dam is continuing. Seismic stability evaluations were conducted at Lenihan and Stevens Creek Dams. Both were found to be seismically stable.

In April 2017, the Governor of California ordered detailed evaluations of large spillway structures at all high-hazard dams. Spillway evaluations are required on 9 of the District's 10 dams. The spillway evaluation for 7 dams have been incorporated into existing projects and a contract for the spillway evaluation of the Lenihan and Stevens Creek dams is scheduled for award in April 2019.

Valley Water is partnering with Pacheco Pass Water District and San Benito County Water District for the Pacheco Reservoir Expansion Project. This Project will encompass the acquisition and expansion of this reservoir from 6,000 AF to 140,000 AF would provide water quality benefits, operational flexibility, emergency storage, flood protection, and ecosystem benefits. On July 24, 2018, the California Water Commission awarded $484.55 million to support the project, including an early funding award of $24.2 million.

Major Capital Improvements Identified in CIP

Storage:

- Almaden Dam Improvements
- Anderson Dam Seismic Retrofit
- Calero Dam Seismic Retrofit
- Guadalupe Dam Seismic Retrofit
- Pacheco Reservoir Expansion

Transmission:

- 10-Year Pipeline Rehabilitation
- FAHCE Implementation
- Main and Madrone Pipeline Rehabilitation
- Vasona Pumping Plant Upgrade

Treatment:

- PWTP Residuals Management
- RWTP Reliability Improvement
- STWTP Filter Media Replacement
- Water Treatment Plant Electrical Improvement

Recycled Water:

- Expedited Purified Water Program
- South County Recycled Water Pipeline

PRIORITY PROCESS AND FINANCIAL ANALYSIS

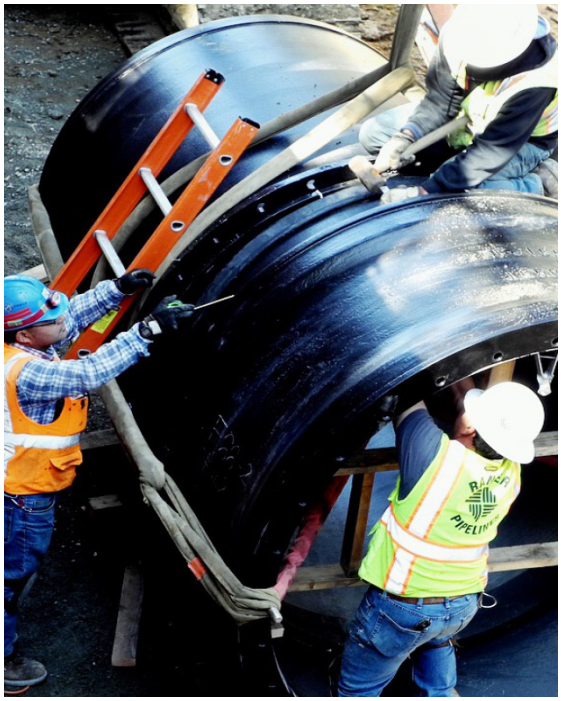
The fiscal year 2019-23 priority criteria for evaluating new water supply projects were carried over to the fiscal year 2020-24 priority setting process to allow time for further discussions on whether changes to the criteria are needed. The priority criteria used to evaluate these projects is included in Appendix A.

Based on the feedback from the FY 2006-07 CIP and Board direction, a concerted effort was made to develop a multi-year water charge structure that would support the priority work of the water utility business. Staff analyzed both immediate requirements and anticipated future needs to support operations and the continued appropriations for capital investment needed to maintain infrastructure and comply with water quality regulations. Each year staff reviews Board priorities, the financial needs of the water utility enterprise fund, current political and economic factors and updates the multi-year structure. The rate structure for the first year is recommended to the Board for adoption during the annual rate setting process.

While the District has one Water Utility fund, the District has two zones of benefit for the purposes of setting groundwater production charges. The North County Zone is very different from the South County Zone in that the water infrastructure is substantially separate and distinct with an entirely different cost of providing service. For example the north zone overlays the Santa Clara groundwater subbasin and is much more densely populated, requiring a large

amount of imported water from outside the county to provide a reliable water supply. To receive, filter and distribute the imported water, the District chose to build three water treatment plants and a network of raw water and treated water distribution pipelines many decades ago. Conversely, the south zone overlays the Coyote and Llagas groundwater subbasins and is more sparsely populated. South County relies primarily on groundwater to serve roughly 50% agricultural and 50% non-agricultural water needs. A small amount of recycled water is served in the Gilroy area. No treated water is served in South County. A small amount of imported water is used to recharge the groundwater subbasins in the South County. The groundwater subbasins have the ability to absorb the recharge and remain healthy under normal water usage levels, unlike the North County, where several sections of the groundwater basin are very sensitive, which is the main reason for building the treatment plant system long ago.

The financial analysis of the Water Utility Enterprise Fund, the funding source for the water supply capital improvements is conducted in conjunction with the groundwater production charge process. After reviewing a number of scenarios the Board directed staff to proceed with an FY 2019-20 increase in the municipal and industrial (M&I) groundwater production charges up to 6.6% in Zone W-2 (North County) and 6.9% in Zone W-5 (South County). This scenario is in line with the Water Supply Master Plan including Baseline Projects, and No Regrets Package. It also provides funding for capital projects in accordance with the timing and funding identified in the FY 2020-24 CIP. Results of the financial analysis are summarized in Appendix B. Preliminary projections indicate the need for annual rate increases of 6.6% on average in subsequent years for North County and 6.9% on average for South County.



The Pacheco Reservoir Expansion Project was added to the FY 2020-24 CIP. The $1.3B investment to complete this project is offset by a $485M grant from the State of California Water Commission's Water Storage Investment Program. The funding model also assumes grant funding of $250M from the Water Infrastructure Improvements for the Nation Act (WIIN Act) and/or a Water Infrastructure Finance and Innovation Act (WIFIA) loan or other supplemental funding.

The majority of capital projects included in the 5-Year CIP are related to asset management which replaces aging equipment and facilities, infrastructure reliability, which protects the county's baseline water supply or Advanced Purified Water which produces a drought-proof source of water.

The District is currently engaged in several critical studies related to understanding the conditions of various water supply facilities and meeting future water supply needs of the county, including updating the Water Supply Master Plan, which is scheduled to be finalized in summer 2019. These studies may identify new capital projects, some of which may require significant capital investment.

Water Supply Capital Improvements

The following table is a project funding schedule for water supply capital improvements resulting from this year's priority process and financial analysis. Detailed information for each project can be found in this document on the following pages in the order presented in this table. The chart also identifies partially funded projects and estimated unspent appropriation from FY 2018-19.

Water Supply Capital Improvements

Project Number	PROJECT NAME	Through FY18	FY19	FY19 Unspent	FY20	FY21	FY22	FY23	FY24	FY25-34	TOTAL
	STORAGE FACILITY										
91854001	Almaden Dam Improvements	13,040	3,764	1,850	-	-	-	-	-	53,806	70,610
91864005	Anderson Dam Seismic Retrofit (C1)	39,499	10,615	-	4,180	3,890	109,381	88,022	99,469	208,227	563,283
91084020s	Calero and Guadalupe Dams Seismic Retrofits	30,157	1,911	839	826	1,193	12,867	25,641	25,694	142,266	240,555
91234002	Coyote Pumping Plant ASD Replacement	536	785	-	1,027	2,845	6,115	4,261	667	85	16,321
91234011	Coyote Warehouse	5,844	1,034	881	1,601	1,120	74	72	-	-	9,745
91084019	Dam Seismic Stability Evaluation	18,812	2,793	-	631	444	5,706	477	498	1,359	30,720
91954002	Pacheco Reservoir Expansion Project	-	17,260	42	42,015	44,253	33,307	25,309	243,929	939,178	1,345,251
91214010s	Small Capital Improvements, San Felipe Reach 1-3	n/a	3,701	-	7,433	3,593	3,482	1,323	1,934	37,581	59,047
	TRANSMISSION FACILITY										
95084002	10-Year Pipeline Rehabilitation (FY18-FY27)	23,989	15,536	-	26,131	15,415	5,472	4,958	5,945	17,282	114,728
92C40357	FAHCE Implementation	-	-	-	-	4,739	4,379	14,691	-	106,609	130,418
26764001	IRP2 Additional Line Valves (A3)	-	1,090	753	399	2,623	4,820	2,492	-	91	11,515
26564001	Main & Madrone Pipelines Restoration (A1)	16,944	292	1	334	-	-	-	-	-	17,570
92144001	Pacheco/Santa Clara Conduit Right of Way Acquisition	2,113	1,514	1,982	-	966	319	-	-	-	4,912
92374005	SCADA Remote Architecture & Communications Upgrade	962	251	300	256	352	981	1,026	1,072	2,432	7,332
92764009	Small Capital Improvements, Raw Water Transmission	n/a	849	-	1,215	33	136	-	260	2,097	4,590
94764006	Small Capital Improvements, Treated Water Transmission	n/a	-	-	178	59	203	179	75	199	893
94084007	Treated Water Isolation Valves	-	529	515	742	86	2,229	2,304	2,382	69	8,341
92264001	Vasona Pump Station Upgrade	831	549	1	525	1,475	20,487	560	-	-	24,427
94084008	Westside Retailer Interties	80	67	73	-	3	374	1,417	120	-	2,061
	TREATMENT FACILITY										
93234044	PWTP Residuals Management	-	-	-	-	710	1,484	7,856	-	-	10,050
93294051s	RWTP Residuals Remediation	43,573	-	6,219	2,633	14,480	1,860	2,632	692	-	65,870
93294057	RWTP Reliability Improvement	164,365	33,232	10,692	14,566	48,664	33,957	13,817	112	-	308,713
93294056	RWTP Treated Water Valves Upgrade	8,594	8	-	21	-	-	-	-	-	8,623
93764004	Small Capital Improvements, Water Treatment	n/a	3,577	-	11,353	3,029	3,800	1,026	5,893	30,354	59,032
93284013	STWTP Filter Media Replacement Project	-	-	-	203	1,179	2,242	5,234	1,845	-	10,703
93084004	Water Treatment Plant Electrical Improvement Project	-	-	-	203	1,340	2,574	6,036	2,116	-	12,269
	RECYCLED WATER FACILITY										
91304001s	Expedited Purified Water Program (EPWP)	20,376	4,440	-	2,480	3,754	2,288	5,628	11,593	169,710	220,269
91094007s	South County Recycled Water Pipeline	36,557	-	10,396	-	9,678	11,581	-	-	-	57,816
	TOTAL	426,720	104,663	34,544	118,952	165,923	270,118	214,961	404,296	1,711,345	3,416,978

FY 2018-19 Funds to be reappropriated

Water Supply Capital Improvements

The following table shows funding requirements from each funding source for water supply capital.

Water Supply - Funding Source ($K)

Fund Number	FUND NAME	Through FY18	FY19	FY19 Unspent	FY20	FY21	FY22	FY23	FY24	FY25-34	TOTAL
61	Water Utility Enterprise Fund	402,731	89,127	34,544	92,821	145,769	260,267	195,312	398,351	1,587,454	3,171,832
26	Safe, Clean Water and Natural Flood Protection Fund	23,989	15,536	-	26,131	20,154	9,851	19,649	5,945	123,891	245,146
	TOTAL	426,720	104,663	34,544	118,952	165,923	270,118	214,961	404,296	1,711,345	3,416,978

FY 2018-19 Funds to be reappropriated

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Storage Facilities

Storage Facilities

- 10 Surface Reservoirs
- 393 Acres of Recharge Ponds
- 76 Miles of In-stream Recharge
- 8 Capital Projects
- Groundwater Basins

Project	**Almaden Dam Improvements**
Program	Water Supply – Storage
Priority No.	50
Project No.	91854001
District Contact	Christopher Hakes chakes@valleywater.org

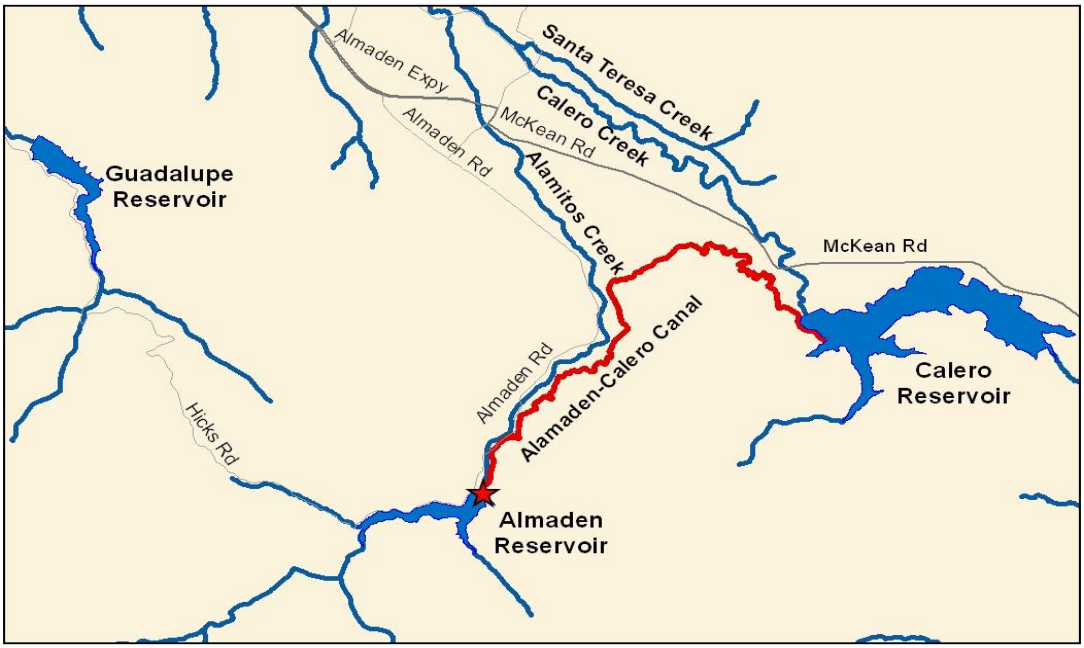
Aerial view of Almaden Dam and spillway, and part of the reservoir

PROJECT DESCRIPTION

This project plans, designs, and constructs improvements to the Almaden Dam outlet works to accomplish the following objectives:

- Modify or construct a new intake structure, capable of releasing 246 cubic feet-per-second (cfs) of water without flushing of sediments through the outlet works.
- Correct existing problems with the outlet energy dissipation structure, piping and valves.
- Restore operational capacity to the Almaden-Calero Canal and stabilize and improve maintenance access.

PROJECT LOCATION



Project Location

SCHEDULE & STATUS

July 1995 to June 2031

Phase	Cost
Plan	5,098
Design	8,570
Construct	37,633
Closeout	4
	54,590

FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY18	FY19	FY20	FY21	FY22	FY23	FY24	Future	
91854001-Almaden Dam Improvements	11,190	3,764	794	160	100	100	100	38,382	54,590
with inflation	11,190	3,764	794	175	114	119	125	53,806	70,086

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY18	FY19		FY20	FY21	FY22	FY23	FY24	Future	
91854001-Almaden Dam Improvements	13,040	2,064	150	644	175	114	119	125	53,806	70,086

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	70,086
Other Funding Source	0
Total	70,086

OPERATING COST IMPACTS

The completion of this project is anticipated to decrease operating costs by approximately $2,000 per year, beginning in FY 2025. Manually flushing the control valves during the winter months to remove silt will no longer be required.

USEFUL LIFE: 50+ Years

Project	**Anderson Dam Seismic Retrofit**
Program	Water Supply – Storage
Priority No.	100
Project No.	91864005
District Contact	Christopher Hakes chakes@valleywater.org

Aerial view of Anderson Dam and spillway, with a portion of the reservoir

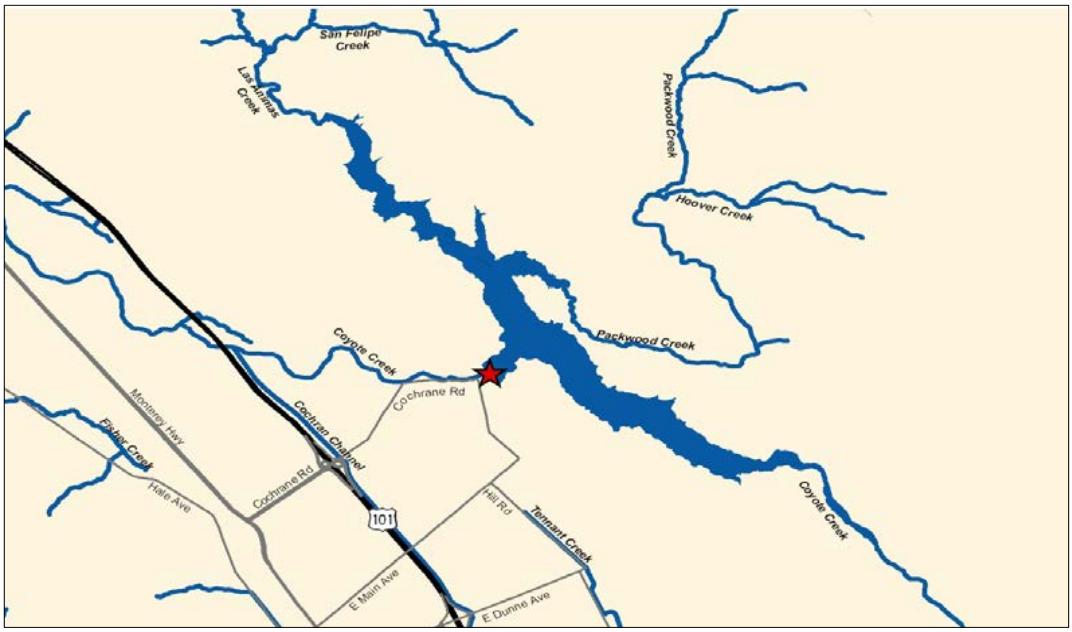
PROJECT DESCRIPTION

This project plans, designs, and constructs seismic retrofit or replacement of outlet works at Anderson Dam, pending completion of a field investigation that will determine whether the Coyote Fault is determined to be "active". Seismic stability improvements will accomplish the following objectives:

- Resolve seismic stability deficiencies to ensure public safety.
- Restore lost reservoir storage capacity resulting from the operational restriction issued by Division of Safety of Dams (DSOD).
- Resolve the DSOD/FERC (Federal Energy Regulatory Commission) requirements in a timely manner.

This project meets the commitments of the voter approved Safe, Clean Water Program, Project C1. For a full description of the SCW benefits and KPI's, please visit www.valleywater.org.

PROJECT LOCATION

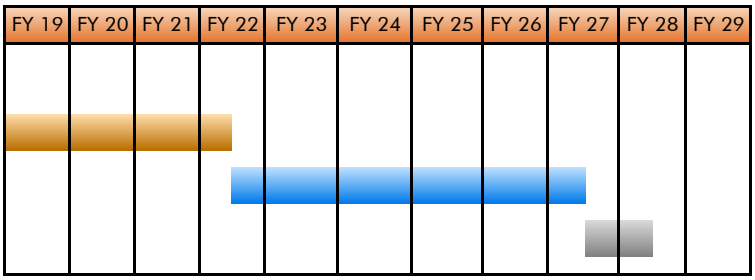


★ Project Location

SCHEDULE & STATUS

January 2011 to December 2027

Phase	Cost
Plan	16,658
Design	37,528
Construct	453,837
Closeout	1,100
	512,793



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY18	FY19	FY20	FY21	FY22	FY23	FY24	Future	
91864005-Anderson Dam Seismic Retrofit	37,883	12,231	4,180	3,562	99,670	79,670	89,670	185,927	512,793
with inflation	37,883	12,231	4,180	3,890	109,381	88,022	99,469	208,228	563,283

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY18	FY19		FY20	FY21	FY22	FY23	FY24	Future	
91864005-Anderson Dam Seismic Retrofit	39,499	10,615	0	4,180	3,890	109,381	88,022	99,469	208,228	563,283

Adjusted Budget includes adopted budget plus a planned budget adjustment of $53,0000.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	497,230
SCVWD Safe Clean Water Fund	66,053
Other Funding Sources	0
Total	**563,283**

OPERATING COST IMPACTS

The completion of this project is not anticipated to increase or decrease annual operating costs, as the project does not significantly alter the existing facilities or modes of operation.

USEFUL LIFE: 50+ Years

Project Calero and Guadalupe Dams Seismic Retrofits
Program Water Supply - Storage
Priority No. 92
District Contact Christopher Hakes chakes@valleywater.org
Project No. 91084020s

Aerial view of the Calero Dam and reservoir

Areial view of the Guadalupe Dam, spillway, and part of the reservoir

PROJECT DESCRIPTION

This project plans, designs, and constructs improvements to the Calero and Guadalupe Dams to accomplish the following objectives:

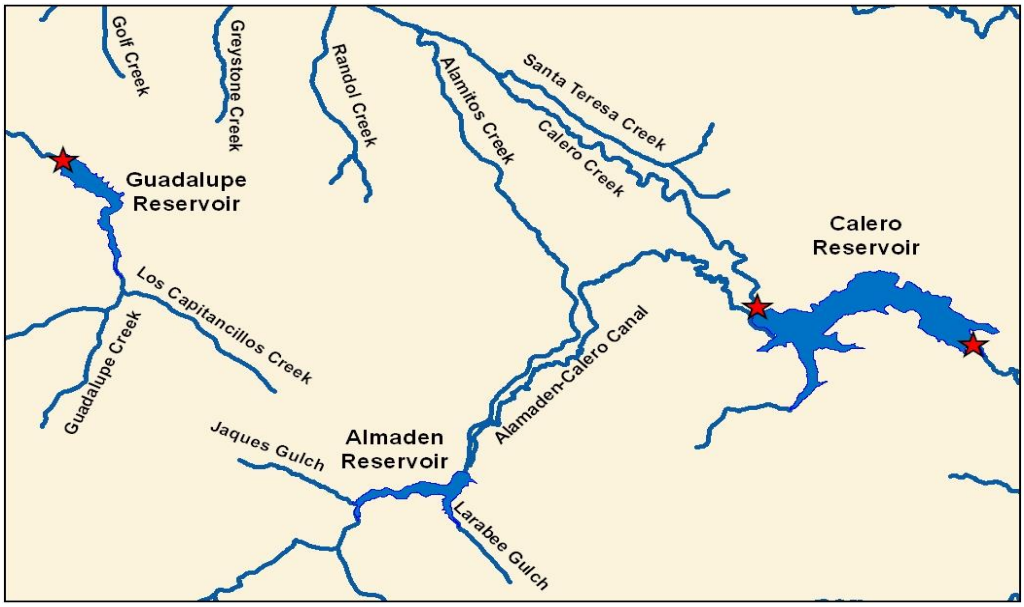
Calero Dam

- Stabilize the embankment to withstand a Maximum Credible Earthquake (MCE).
- Modify or replace the outlet works if determined to be inadequate.
- Modify the spillway or increase the freeboard of the dam for safe passage of the Probable Maximum Flood (PMF).
- Provide modifications that do not preclude potential future expansion of dam and reservoir to provide additional reservoir storage.
- Remove or relocate the Bailey Ranch structures and breach Fellow's Dike.

Guadalupe Dam

- Stabilize the embankment to withstand a MCE.
- Implement improvements as necessary for the dam system to safely pass the PMF.
- Ensure that the outlet works and hydraulic control system meet the Division of Safety of Dams (DSOD) requirements.
- Relocate the intake structure out of the upstream berm in a timely manner.
- Incorporate other measures to address seismic and other dam safety deficiencies that are identified through the Project delivery process.

PROJECT LOCATION

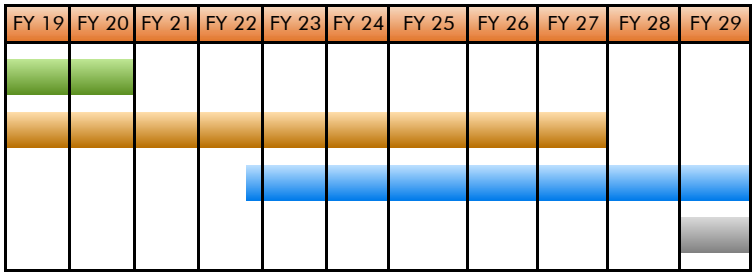


★ Project Location

SCHEDULE & STATUS

July 2012 to June 2030

Phase	Cost
Plan	6,507
Design	22,934
Construct	166,752
Closeout	80
	202,023



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**Future**	
91084020 - Calero and Guadalupe Dams Seismic Retrofits-Planning	8,708	300	340	0	0	0	0	0	9,348
with inflation	8,708	300	340	0	0	0	0	0	9,348
91874004 - Calero Dam Seismic Retrofit-Design & Construct	9,713	3,296	408	315	100	100	80	104,388	118,400
with inflation	9,713	3,296	408	344	114	119	100	135,732	149,826
91894002 - Guadalupe Dam Seismic Retrofit-Design & Construct	7,372	1,840	789	777	11,600	23,075	23,000	5,822	74,275
with inflation	7,372	1,840	789	849	12,753	25,522	25,594	6,535	81,254
TOTAL	**25,793**	**5,436**	**1,537**	**1,092**	**11,700**	**23,175**	**23,080**	**110,210**	**202,023**
with inflation	**25,793**	**5,436**	**1,537**	**1,192**	**12,867**	**25,641**	**25,694**	**142,266**	**240,427**

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	**FY18**	**FY19**		**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**Future**	
91084020 - Calero and Guadalupe Dams Seismic Retrofits-Planning	9,476	0	468	0	0	0	0	0	0	9,476
91874004 - Calero Dam Seismic Retrofit-Design & Construct	11,411	1,713	115	293	344	114	119	100	135,732	149,826
91894002 - Guadalupe Dam Seismic Retrofit-Design & Construct	9,270	198	256	533	849	12,753	25,522	25,594	6,535	81,254
TOTAL	**30,157**	**1,911**	**839**	**826**	**1,192**	**12,867**	**25,641**	**25,694**	**142,266**	**240,555**

Adjusted Budget includes adopted budget plus approved budget adjustments. Allocated funding exceeds the projected cost of one of the projects listed above by approximately $128,000. Excess funds will be returned to Fund Reserves at the close of the project.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	240,555
Other Funding Source	0
Total	**240,555**

OPERATING COST IMPACTS

Operating cost impacts are anticipated and will be determined during the planning phase.

USEFUL LIFE: 50+ Years

Project	**Coyote Pumping Plant ASD Replacement**
Program	Water Supply – Storage
Priority No.	70
Project No.	91234002
District Contact	Katherine Oven koven@valleywater.org

ASD motors at the Coyote Pumping Plant

PROJECT DESCRIPTION

This project plans, designs, and constructs improvements to the Coyote Pumping Plant Adjustable Speed Drives (ASD) to accomplish the following objectives:

- Replace existing outdated and unsupported ASDs with the latest technology.
- Modify/convert existing six wound rotor motors to be compatible with new stator fed ASD.
- Upgrade the HVAC system to support the additional cooling requirements.
- Modify/upgrade Supervisory Control and Data Acquisition (SCADA) control and instrumentation systems, and control strategy to support the new ASDs.
- Replace two main medium voltage circuit breakers and one medium voltage tie circuit breaker (switch) which are at the end of service life.
- Replace motor control equipment line-up (MCE) with new switchgears.
- Installation of a pump motor vibration and a power monitoring system and motor control center.

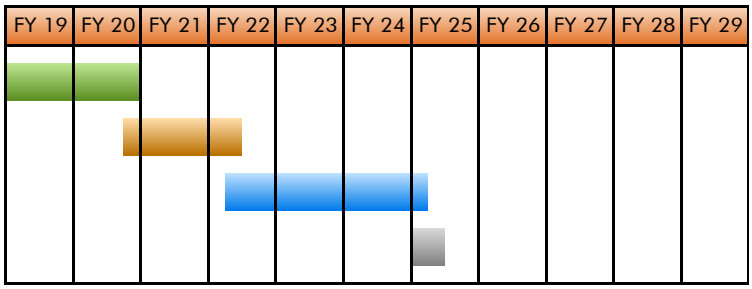
PROJECT LOCATION

★ Project Location

SCHEDULE & STATUS

July 2017 to October 2024

Phase	Cost
Plan	1,365
Design	1,194
Construct	12,305
Closeout	65
	14,930



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY18	FY19	FY20	FY21	FY22	FY23	FY24	Future	
91234002-Coyote Pumping Plant ASD Replacement	236	1,085	1,027	2,662	5,550	3,735	570	65	14,930
with inflation	236	1,085	1,027	2,845	6,115	4,261	667	85	16,320

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY18	FY19		FY20	FY21	FY22	FY23	FY24	Future	
91234002-Coyote Pumping Plant ASD Replacement	536	785	0	1,027	2,845	6,115	4,261	667	85	16,320

Adjusted Budget includes adopted budget plus a planned budget adjustment of $87,000.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	16,320
Other Funding Sources	0
Total	**16,320**

OPERATING COST IMPACTS

The completion of this project is anticipated to decrease operating costs by approximately $60,000 per year beginning in FY 2024.

USEFUL LIFE: Not Available

Project	**Coyote Warehouse**
Program	Water Supply - Storage
Priority No.	48
Project No.	91234011
District Contact	Katherine Oven koven@valleywater.org

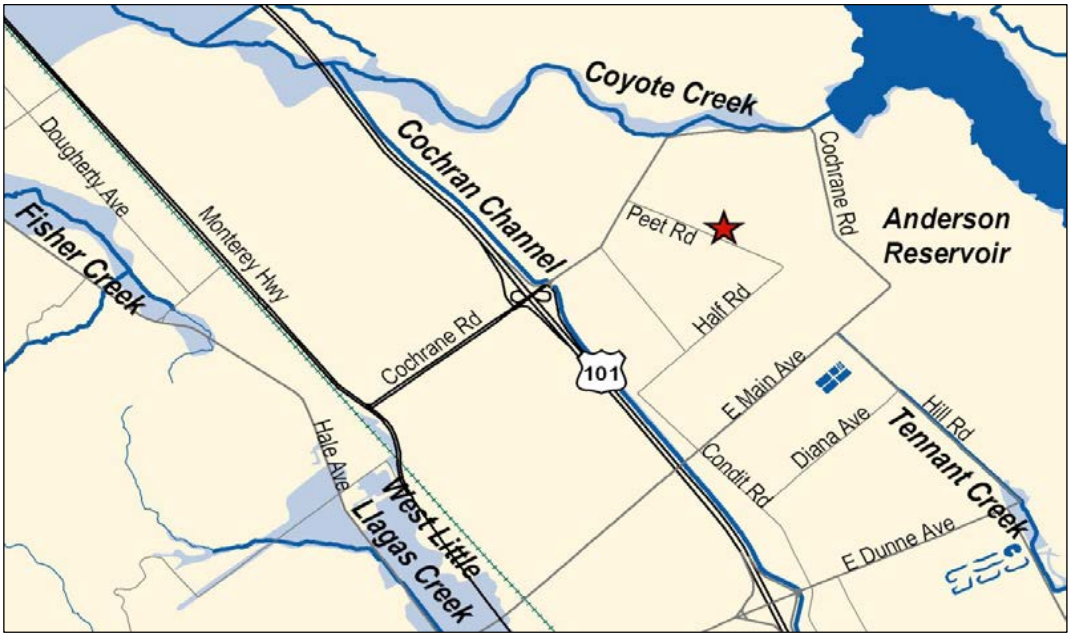
Storage containers used to secure equipment and spare parts

PROJECT DESCRIPTION

This project plans, designs, and constructs the Coyote Warehouse to accomplish the following objectives:

- Provide suitable storage space for pipeline spare parts and appurtenances to protect such materials from weather.
- Improve District's staff efficiency and effectiveness in pipeline maintance work.

PROJECT LOCATION

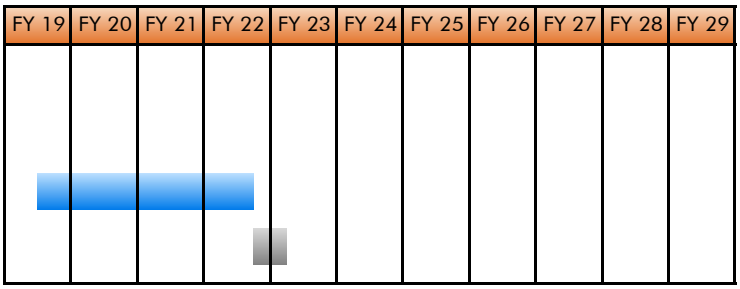


★ Project Location

SCHEDULE & STATUS

July 2014 to December 2022

Phase	Cost
Plan	137
Design	677
Construct	8,129
Closeout	60
	9,630



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY18	FY19	FY20	FY21	FY22	FY23	FY24	Future	
91234011-Coyote Warehouse	1,338	4,659	2,482	1,026	65	60	0	0	9,630
with inflation	1,338	4,659	2,482	1,120	74	72	0	0	9,745

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY18	FY19		FY20	FY21	FY22	FY23	FY24	Future	
91234011-Coyote Warehouse	5,844	1,034	881	1,601	1,120	74	72	0	0	9,745

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	9,745
Other Funding Sources	0
Total	9,745

OPERATING COST IMPACTS

Operating cost impacts are anticipated and will be determined upon completion of the design phase.

USEFUL LIFE: 50 years

Project	**Dam Seismic Stability Evaluations**
Program	Water Supply – Storage
Priority No.	92
Project No.	91084019
District Contact	Christopher Hakes chakes@valleywater.org

Field exploration for seismic stability evaluations

PROJECT DESCRIPTION

This project conducts preliminary planning (seismic stability evaluation) for nine dams (shown on the map) to accomplish the following objectives:

- Address seismic stability issues.
- Provide for public safety.
- Ensure operational availability of reservoirs.
- Address protection of the assets.

Site-specific planning, design, and construction of dam seismic stability improvements will be funded separately. This project funds preliminary planning (seismic stability evaluation, to determine the need for seismic stability improvements) for eight dams. The seismic stability evaluation for Anderson Dam was completed in a separate project. The seismic analysis for Almaden, Calero, Guadalupe, Lenihan, and Stevens Creek Dams has been completed. The analysis for Coyote, Chesbro and Uvas is continuing through 2020.

PROJECT LOCATION

★ Project Location

SCHEDULE & STATUS

August 2009 to December 2026

(Planning Phase Only)
Dam Safety Evaluation Report will take 5 years to complete, starting in 2015.

Phase	Cost
Plan	24,444
Design	-
Construct	-
Closeout	-
	29,444

FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY18	FY19	FY20	FY21	FY22	FY23	FY24	Future	
91084019-Dam Seismic Stability Evaluations	18,693	2,913	631	407	5,000	400	400	1,000	29,444
with inflation	18,693	2,913	631	444	5,706	477	498	1,359	30,721

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	FY18	FY19		FY20	FY21	FY22	FY23	FY24	Future	
91084019-Dam Seismic Stability Evaluations	18,812	2,794	0	631	444	5,706	477	498	1,359	30,721

Adjusted Budget includes adopted budget plus a planned budget adjustment of $1,700,000.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	30,721
Other Funding Source	0
Total	30,721

OPERATING COST IMPACTS

The completion of this project is not anticipated to increase or decrease annual operating costs, as the project does not significantly alter the existing facilities or modes of operation.

USEFUL LIFE: 50+ Years

Project	**Pacheco Reservoir Expansion Project**
Program	Water Supply – Storage
Priority No.	55
Project No.	91954002
District Contact	Christopher Hakes chakes@valleywater.org

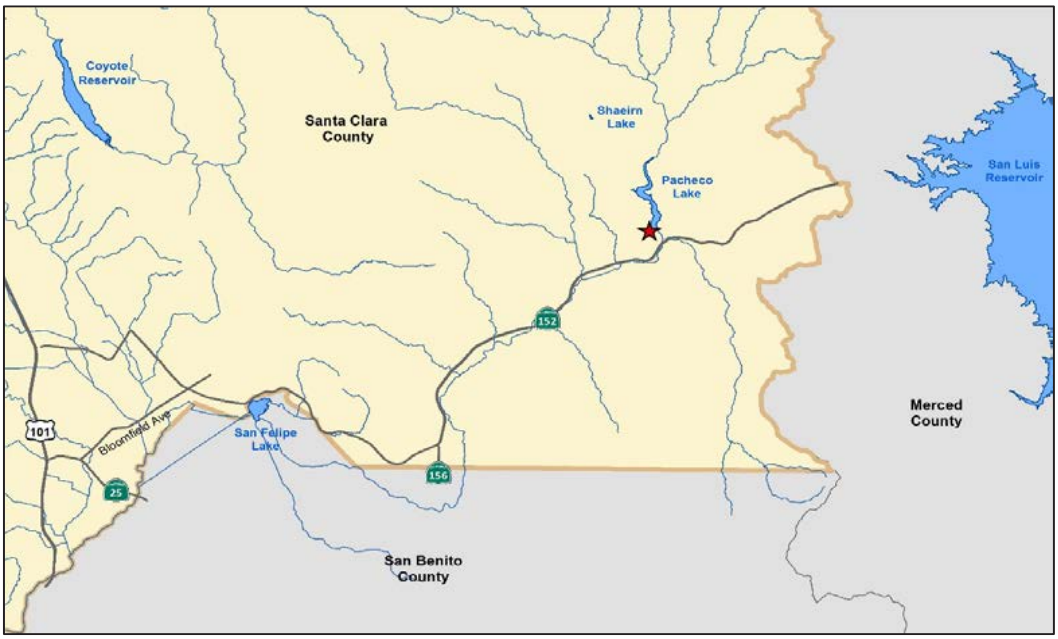
View of Pacheco Reservoir from the dam

PROJECT DESCRIPTION

This project will include expanding the storage capacity of the existing Pacheco Reservoir to 140,000 acre-feet through construction and operation of a new dam, conveyance facilities, and related appurtenant structures. The project objectives:

- Increase suitable habitat in Pacheco Creek for federally threatened steelhead.
- Increase water supply reliability to help meet municipal and industrial (M&I) water demands in Santa Clara County during drought periods and emergencies, or to address shortages due to regulatory and environmental restrictions.
- Develop water supplies for environmental water management that support habitat management and other environmental water needs.
- Avoid supply interruptions when water is needed by increasing the certainty of meeting the requested delivery schedule throughout the year to south-of-Delta contractors dependent on San Luis Reservoir.
- Reduce flood risks along Pacheco Creek and downstream areas.

PROJECT LOCATION

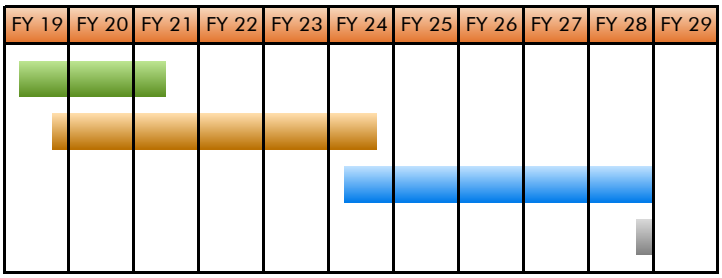


★ Project Location

SCHEDULE & STATUS

October 2018 to June 2028

Phase	Cost
Plan	68,359
Design	91,390
Construct	994,103
Closeout	360
	1,154,212



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY18	FY19	FY20	FY21	FY22	FY23	FY24	Future	
91954002-Pacheco Reservoir Expansion Project	0	17,218	42,057	40,524	29,187	21,223	208,361	795,642	1,154,212
with inflation	0	17,218	42,057	44,253	33,307	25,309	243,929	939,179	1,345,252

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY18	FY19		FY20	FY21	FY22	FY23	FY24	Future	
91954002-Pacheco Reservoir Expansion Project		17,260	42	42,015	44,253	33,307	25,309	243,929	939,179	1,345,252

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	438,561
California Water Commission	484,550
Other Funding Sources "Unsecured" (WIIN and WIFIA)	250,000
Partnership Contributions	172,140
Total	**1,345,252**

OPERATING COST IMPACTS

TBD

USEFUL LIFE: TBD

Project	**Small Capital Improvements, San Felipe**
Program	Water Supply – Storage
Priority No.	76
Project No.	91214010s
District Contact	Kurt Arends karends@valleywater.org

Example of bacterial corrosion on a suction wear ring of an impeller

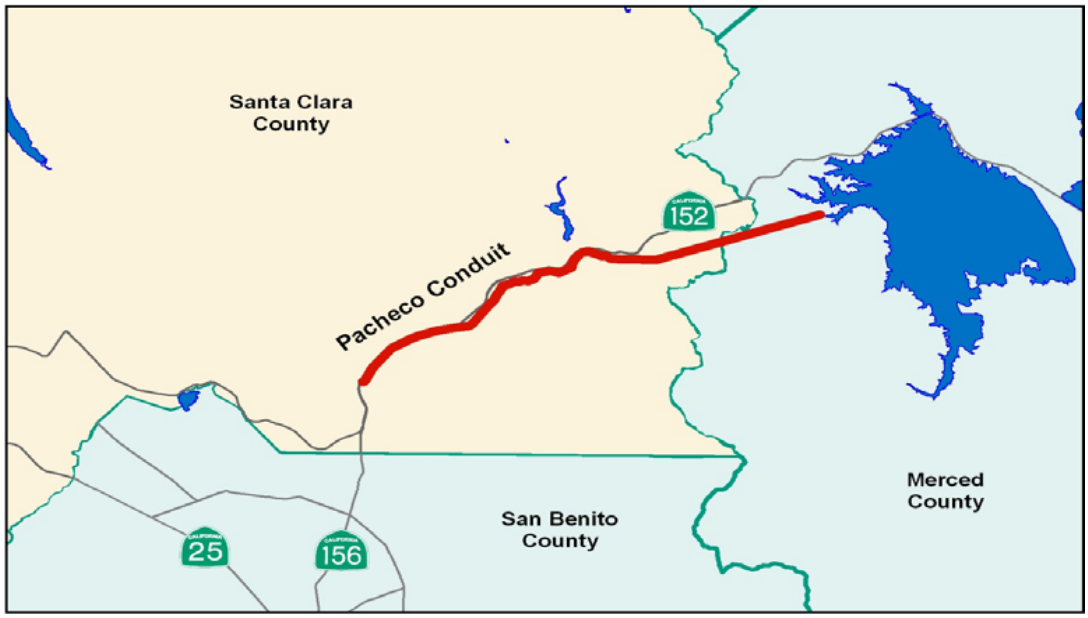
PROJECT DESCRIPTION

This project provides resources for the improvement of small capital investments that replace or extend the life of an asset. This project implements a systematic approach to equipment replacement and renewal at facilities contained within San Felipe Division by designing and constructing improvements identified through the District's 10-year asset management program. Infrastructure within this project includes tunnels, large diameter pipelines and valve structures, pumps and associated equipment, as well as a large, above-ground storage tank. The Reach 1 renewal and replacement activities are conducted in coordination and cooperation with San Felipe Division Reach 1 contractors and other agencies. Planned projects for FY 2020 include:

- 91214010 Reach 1: Refurbish or Rebuild the pump, motor windings and bearings for Pump Units 1 & 6. Fire suppression system installation; Electrical Upgrades; Pacheco pipeline improvements (valves, inspections etc..); Pacheco Conduit for Solar Installation on Rectifiers; Pacheco Pumping Plant (PPP) - Site Security System - Replacement; Pacheco Pump Shop Air Compressor- Replacement ; PPP ASD Gallery; HMI SERVER - Replacement; PPP ASD Gallery; Primary Domain Controller (PDC) - Replacement; Pacheco Pump Unit #7 Pump Discharge Guard Valve- Replacement; PPP Totalizing Energy Meter Evaluate System; Discuss and determine if a totaling energy meter is needed to measure incoming power from PWRPA.
- 91224010 Reach 2: CFI/CFO Road Access Fix (culvert replacements); Environmental clearance/permitting.
- 91234010 Reach 3: Replace existing end-of-life staff trailers. Purchase and install mezanine and shelving in new warehouse.

All active projects have positive NPV saving at feasibility study phase subject to design phase validation.

PROJECT LOCATION



Project Location

SCHEDULE & STATUS

This project is part of a regularly scheduled 10-year maintenance and asset management program.

Traditional planning, design, and construction phases do not apply.

Phase	Cost
Plan	n/a
Design	n/a
Construct	n/a
Closeout	n/a
	45,035

FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**Future**	
91214010-Small Capital Improvements, San Felipe Reach 1	n/a	2,902	5,716	3,290	3,022	1,109	1,534	22,104	39,677
with inflation	n/a	2,902	5,716	3,593	3,449	1,323	1,912	33,349	52,243
91224010-Small Capital Improvements, San Felipe Reach 2	n/a	595	867	0	0	0	0	500	1,962
with inflation	n/a	595	867	0	0	0	0	615	2,077
91234010-Small Capital Improvements, San Felipe Reach 3	n/a	205	850	0	29	0	18	2,294	3,396
with inflation	n/a	205	850	0	33	0	22	3,617	4,728
TOTAL	**0**	**3,702**	**7,433**	**3,290**	**3,051**	**1,109**	**1,552**	**24,898**	**45,035**
with inflation	**0**	**3,702**	**7,433**	**3,593**	**3,482**	**1,323**	**1,934**	**37,581**	**59,048**

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	**FY18**	**FY19**		**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**Future**	
91214010-Small Capital Improvements, San Felipe Reach 1	n/a	2,901	0	5,716	3,593	3,449	1,323	1,912	33,349	52,242
91224010-Small Capital Improvements, San Felipe Reach 2	n/a	595	0	867	0	0	0	0	615	2,077
91234010-Small Capital Improvements, San Felipe Reach 3	n/a	205	0	850	0	33	0	22	3,617	4,728
TOTAL	**0**	**3,701**	**0**	**7,433**	**3,593**	**3,482**	**1,323**	**1,934**	**37,581**	**59,047**

Adjusted Budget includes adopted budget plus approved budget adjustments. Small Capital Improvement projects do not carry forward unspent funds from one fiscal year to the next. Unspent funds are returned to fund reserves at the close of each fiscal year and new funding is provided in the next fiscal year.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	45,720
San Benito County Water District	13,327
Total	**59,047**

OPERATING COST IMPACTS

The completion of this project is not anticipated to increase or decrease annual operating costs, as the project does not significantly alter the existing facilities or modes of operation.

USEFUL LIFE: Not Available

Transmission Facilities

Transmission Facilities

- 142 Miles of Pipelines
- 3 Pump Stations
- 11 Capital Projects

Project	**10-Year Pipeline Inspection & Rehabilitation**
Program	Water Supply – Transmission
Priority No.	78
Project No.	95084002
District Contact	Katherine Oven KOven@valleywater.org

A typical rehabilitated line valve assembly

PROJECT DESCRIPTION

The project develops the District's large diameter Pipeline Management Strategy and a 10-year program for implementation tasks associated with the strategy. This program involves the inspection, planning, design for renewal of the District's large pipelines and tunnels. The project work includes the following objectives:

- Perform dewatering and internal inspections of District's pipelines and tunnels.
- Renew distressed pipe sections as required. Renewal encompasses the actions of repair, rehabilitation, and replacement.
- Perform condition assessment, maintenance, repair, coating and other activities as required.
- Replace line valves, flow meters, pipeline appurtenance assemblies, and piping as required.
- Improve system performance by installing Cathodic Protection Systems, Accoustic Fiber Optical Monitoring of PCCP, and transient pressure monitoring systems.
- Development of a Pipeline Asset Risk Management System that includes GIS, databases, algorithms, models, data acquisition, program documents, and decision support systems.

The first 5 years will include inspection and renewal work along the various pipelines and tunnels as identified below:

- 2019: Cross Valley Pipeline and Calero Pipeline
- 2020: Central Pipeline, Parallel East Pipeline
- 2021: Santa Clara Conduit, Pacheco Tunnel Reach 2, Santa Clara Tunnel
- 2022: West Pipeline, Penitencia Delivery Main, Penitencia Force Main
- 2023: Almaden Valley Pipeline, Santa Teresa Force Main, Stevens Creek Pipeline

PROJECT LOCATION

Project Location

SCHEDULE & STATUS

July 2017 to June 2027

Phase	Cost
Plan	3,250
Design	13,857
Construct	83,812
Closeout	380
	107,418

FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY18	FY19	FY20	FY21	FY22	FY23	FY24	Future	
95084002-10-Year Pipeline Inspection & Rehabilitation	22,585	16,940	26,131	14,370	4,880	4,270	4,910	13,332	107,418
with inflation	22,585	16,940	26,131	15,415	5,472	4,958	5,945	17,282	114,728

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY18	FY19		FY20	FY21	FY22	FY23	FY24	Future	
95084002-10-Year Pipeline Inspection & Rehabilitation	23,989	15,536	0	26,131	15,415	5,472	4,958	5,945	17,282	114,728

Adjusted Budget includes adopted budget plus a planned budget adjustment of $1,671,000.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	114,728
Other Funding Sources	0
Total	114,728

OPERATING COST IMPACTS

The completion of this project is not anticipated to increase or decrease annual operating costs, as the project does not significantly alter the existing facilities or modes of operation.

USEFUL LIFE: 50 Years

Project	**FAHCE Implementation**
Program	Water Supply - Transmission
Priority No.	73
Project No.	92C40357
District Contact	Vincent Gin VGin@valleywater.org

Fish habitats such as the one shown here will be developed for Habitat Conservation.

PROJECT DESCRIPTION

In 1996, Guadalupe-Coyote Resource Conservation District (GCRCD) filed a water rights complaint with the State Water Resources Control Board (SWRCB) alleging the District's exercise of its appropriative water rights in Coyote Creek, Guadalupe River and Stevens Creek and their tributaries (Three Creeks) was not providing adequate flows for the protection of fisheries and other aquatic resources. A negotiation process (i.e. Fish and Aquatic Habitat Collaborative Effort [FAHCE]) ensued and resulted in the initialing of the FAHCE Settlement Agreement in 2003 by GCRCD, U.S. Fish and Wildlife, National Marine Fisheries Service, California Department of Fish and Wildlife, and other parties. The FAHCE Settlement Agreement includes a proposed FAHCE program that was reviewed by staff of the State and Federal resource management agencies, and will again receive regulatory review as it undergoes environmental impact review prior to implementation to ensure compliance with all applicable laws. The FAHCE program focuses on habitat improvements for steelhead and chinook salmon and is intended to comprehensively address and resolve all issues in the water rights complaint and any related issues arising under State and Federal laws that concern the impacts of the District's facilities and operation on the beneficial uses of the Three Creeks. Once environmental impact review of the FAHCE program is completed, it will be submitted to the SWRCB and included in the District's Three Creek appropriative water rights. The FAHCE program consists of reservoir reoperations to support salmonid spawning, rearing and migration; fish passage remediation and aquatic habitat restoration measures; and an adaptive management program.

PROJECT LOCATION

Project sites will be located at reservoirs and streams within the Three Creeks Project Area, in the Guadalupe, Coyote and Stevens Creek Watersheds. Project site locations are yet to be determined and no map is provided.

SCHEDULE & STATUS

July 2020 to June 2026

Phase	Cost
Plan	130,418
Design	-
Construct	-
Closeout	-
	130,418

FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY18	FY19	FY20	FY21	FY22	FY23	FY24	Future	
92C40357-FAHCE Implementation	0	0	0	4,739	4,379	14,691	0	106,609	130,418
with inflation	0	0	0	4,739	4,379	14,691	0	106,609	130,418

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY18	FY19		FY20	FY21	FY22	FY23	FY24	Future	
92C40357-FAHCE Implementation	0	0	0	0	4,739	4,379	14,691	0	106,609	130,418

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	130,418
Other Funding Source	0
Total	130,418

OPERATING COST IMPACTS

Operating cost impacts will vary, depending on the requirements for maintenance of each site. Once the sites have been identified, operating costs will be determined based on the existing conditions and maintenance identified for each site.

USEFUL LIFE: Not Available

Project	**IRP2 Additional Line Valves**
Program	Water Supply – Transmission
Priority No.	63
Project No.	26764001
District Contact	Katherine Oven KOven@valleywater.org

New line valves, actuators, and vaults similar to this will be installed along the East, West, and Snell pipelines

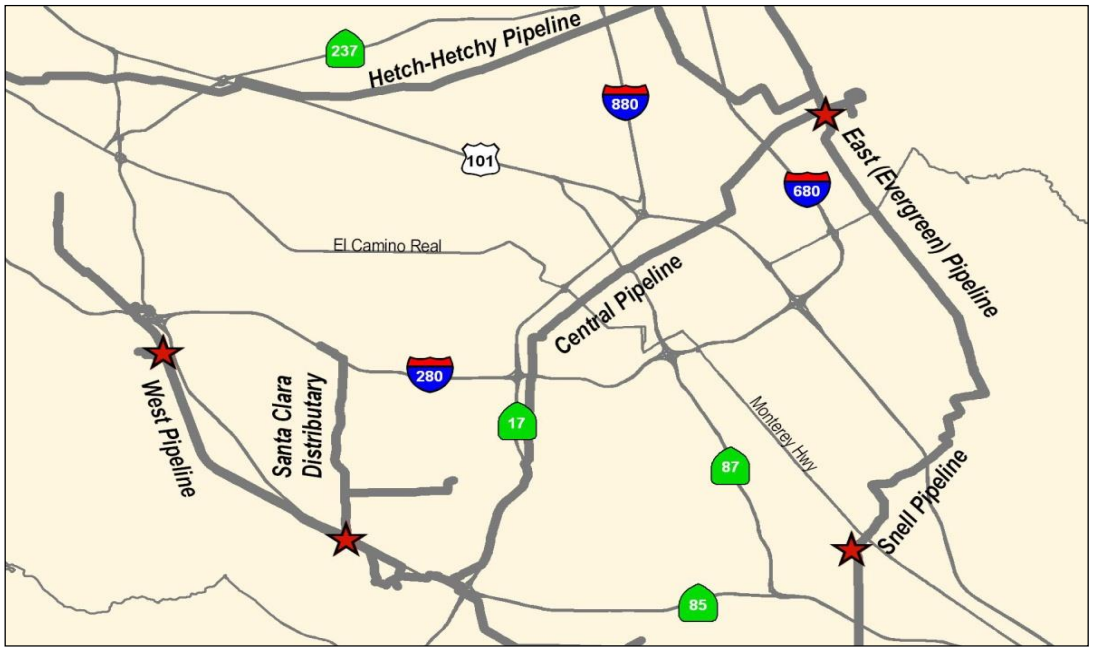
PROJECT DESCRIPTION

This project plans, designs, and constructs four additional line valves in the treated water distribution system, as defined in the Water Infrastructure Reliability Plan, Phase 2 (IRP2). Design and Construction of this project will be in conjunction with work on the same pipelines under the 10- year Pipeline Inspection and Rehabilitation Project. The new line valves will be at various locations along the East, West, and Snell pipeline to accomplish the following objectives:

- Allow the District to isolate sections of the treated water pipeline for general maintenance or to repair activities following a major seismic event.
- Allow the network of emergency wells to operate, even when there is damage upstream and downstream of individual wells.

This project meets the commitments of the Safe, Clean Water Program, Project A3. For a full description of the SCW benefits and KPI's, please visit www.valleywater.org.

PROJECT LOCATION



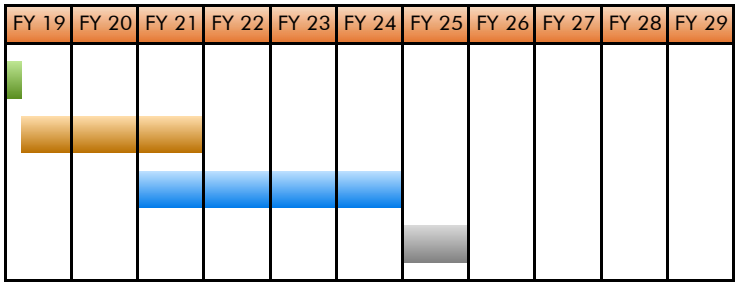
★ Project Location

SCHEDULE & STATUS

July 2018 to June 2025

Line valve construction to be coordinated with pipeline maintenance and rehabilitation projects.

Phase	Cost
Plan	209
Design	1,547
Construct	8,728
Closeout	70
	10,554



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY18	FY19	FY20	FY21	FY22	FY23	FY24	Future	
26764001-IRP2 Additional Line Valves	0	337	1,152	2,449	4,364	2,182	0	70	10,554
with inflation	0	337	1,152	2,623	4,820	2,492	0	91	11,515

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY18	FY19		FY20	FY21	FY22	FY23	FY24	Future	
26764001-IRP2 Additional Line Valves	0	1,090	753	399	2,623	4,820	2,492	0	91	11,515

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Safe Clean Water Fund	11,515
Other Funding Source	0
Total	11,515

OPERATING COST IMPACTS

The completion of this project is not anticipated to increase or decrease annual operating costs, as the project does not significantly alter the existing facilities or modes of operation.

USEFUL LIFE: 35 Years

Project Main & Madrone Pipelines Restoration
Program Water Supply - Transmission
District Contact Katherine Oven koven@valleywater.org

Priority No. 70
Project No. 26564001

Main Avenue Ponds facing North

Madrone Pipeline Outlet into Madrone Channel looking North along Northbound Interstate 101

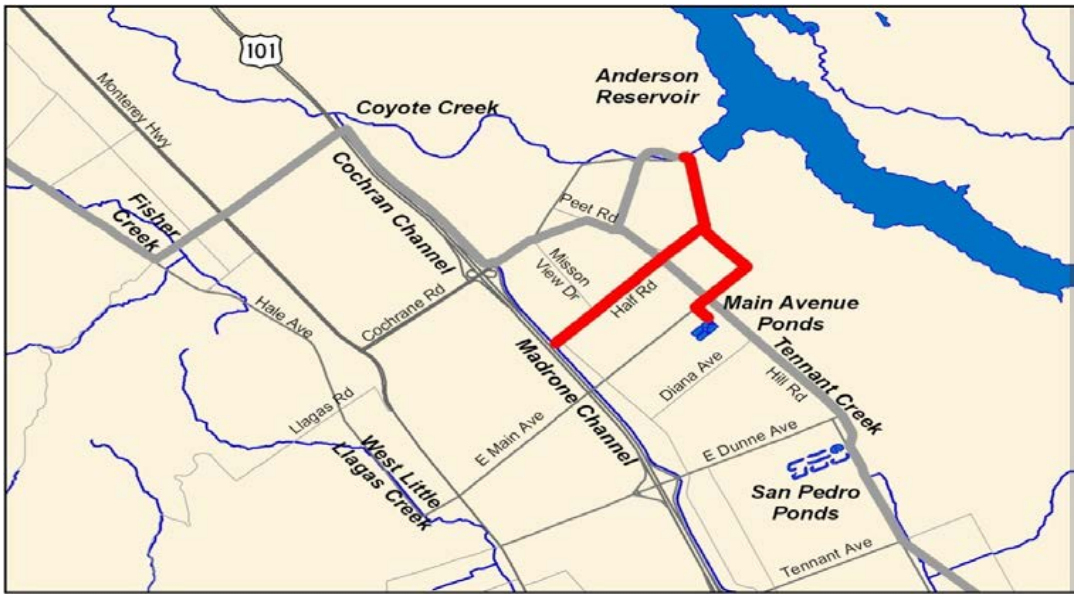
PROJECT DESCRIPTION

This project plans, designs, and constructs improvements on the full length of the Madrone Pipeline and rehabilitates the Main Avenue Pipeline to accomplish the following objectives:

- Provide the means to utilize another reliable water source, (e.g. Anderson Reservoir) to supply water to the Main Avenue Ponds and the Madrone Channel.
- Allow for greater flows to the Main Avenue Ponds and the Madrone Channel.
- Maximize imported water flows to the treatment plants.

This project meets the commitments of the voter approved Safe, Clean Water Program, Project A1. For a full description of the SCW benefits and KPI's, please visit www.valleywater.org.

PROJECT LOCATION

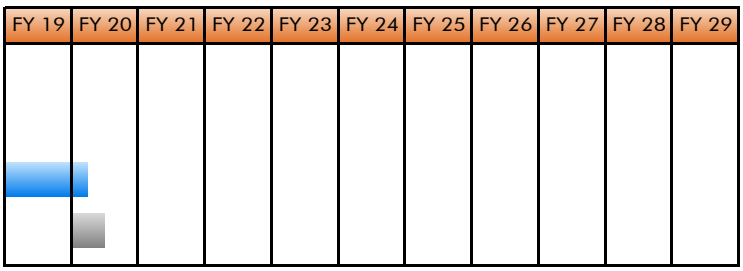


Project Location

SCHEDULE & STATUS

July 2014 to December 2019

Phase	Cost
Plan	340
Design	3,032
Construct	6,399
Closeout	90
	17,569



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY18	FY19	FY20	FY21	FY22	FY23	FY24	Future	
26564001-Main & Madrone Pipelines Restoration	16,301	934	334	0	0	0	0	0	17,569
with inflation	16,301	934	334	0	0	0	0	0	17,569

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY18	FY19		FY20	FY21	FY22	FY23	FY24	Future	
26564001-Main & Madrone Pipelines Restoration	16,944	292	1	333	0	0	0	0	0	17,569

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Safe, Clean Water Fund	6,354
SCVWD Water Utility Enterprise Fund	11,215
Total	**17,569**

OPERATING COST IMPACTS

The completion of this project is not anticipated to increase or decrease annual operating costs, as it does not significantly alter the facility or modes of operation.

USEFUL LIFE: 40 Years

Project	**Pacheco/Santa Clara Conduit Right of Way Acquisition**
Program	Water Supply – Transmission
Priority No.	75
Project No.	92144001
District Contact	Katherine Oven Koven@valleywater.org

Access to much of the San Felipe Division pipelines must currently be made through private property, due to a lack of easements, such as Bloomfield access at Vault 21-23.

PROJECT DESCRIPTION

This project plans, designs, and constructs improvements related to the acquisition of right-of-way along the South County Pipeline to accomplish the following objectives:

- Provide unlimited access to District owned pipeline.
- Reduce conflicts with local land owners and improve response time for emergency repairs or operations.

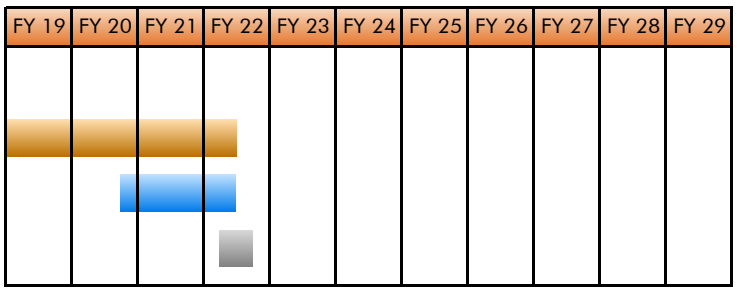
PROJECT LOCATION

Project Location

SCHEDULE & STATUS

July 2009 to March 2021

Phase	Cost
Plan	1,290
Design	2,426
Construct	919
Closeout	35
	4,761



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY18	FY19	FY20	FY21	FY22	FY23	FY24	Future	
92144001-Pacheco/Santa Clara Conduit Right of Way Acquisition	1,545	100	1,584	1,251	281	0	0	0	4,761
with inflation	1,545	100	1,584	1,364	319	0	0	0	4,912

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY18	FY19		FY20	FY21	FY22	FY23	FY24	Future	
92144001-Pacheco/Santa Clara Conduit Right of Way Acquisition	2,113	1,514	1,982	0	966	319	0	0	0	4,912

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

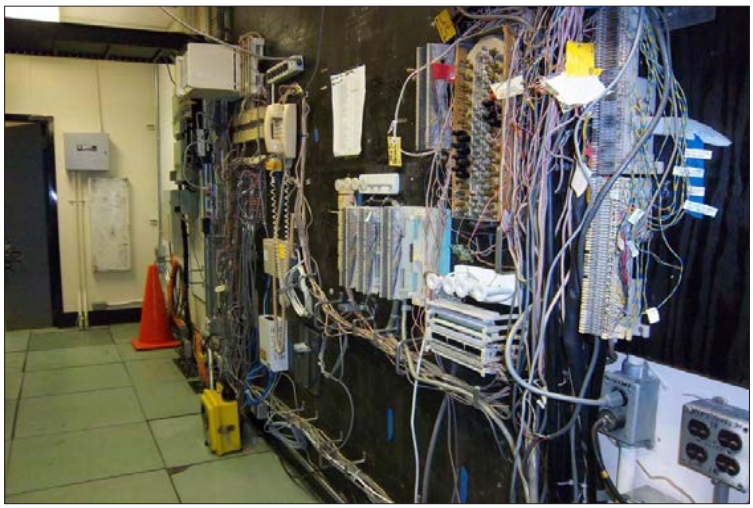
SCVWD Water Utility Enterprise Fund	4,146
San Benito County Water District	766
Total	4,912

OPERATING COST IMPACTS

The completion of this project is anticipated to increase operating costs by approximately $8,000 per year, beginning in FY 2020, for vegetation control and/or maintenance of fences, gates and locks for the access roads.

USEFUL LIFE: 15-20 Years

Project	**SCADA Remote Architecture and Communications Upgrade**
Program	Water Supply – Transmission
Priority No.	74
Project No.	92374005
District Contact	Katherine Oven koven@valleywater.org



Raw Water Control Center Hub at Rinconada Water Treatment Plant similar to what will be installed at other facilities

PROJECT DESCRIPTION

This project plans, designs, and implements improvements to the back-up raw water control center and Process Control Systems (SCADA) telemetry to accomplish the following objectives:

- Construct a water control center that eliminates succeptability to a single point failure.
- Upgrade the SCADA telemetry system to remove the single points of failure and to provide a robust and reliable telemetry system.

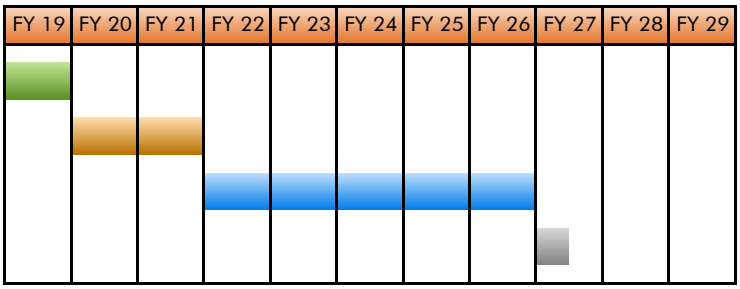
PROJECT LOCATION

★ Project Location

SCHEDULE & STATUS

July 2015 to December 2026

Phase	Cost
Plan	905
Design	883
Construct	4,300
Closeout	100
	6,191



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY18	FY19	FY20	FY21	FY22	FY23	FY24	Future	
92374005-SCADA Remote Architecture and Communications Upgrade	593	320	556	322	860	860	860	1,820	6,191
with inflation	593	320	556	352	981	1,026	1,072	2,432	7,332

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY18	FY19		FY20	FY21	FY22	FY23	FY24	Future	
92374005-SCADA Remote Architecture and Communications Upgrade	962	251	300	256	352	981	1,026	1,072	2,432	7,332

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	5,773
San Benito County Water District	1,559
Total	7,332

OPERATING COST IMPACTS

The completion of this project is anitcipated to increase operating costs by approximately $80,440 per year, beginning in FY 2026 for operational support provided by control technicians, IT technicians, and SCADA engineers.

USEFUL LIFE: 25 Years

Project	**Small Capital Improvements, Raw Water Transmission**
Program	Water Supply – Transmission
Priority No.	73
Project No.	92764009
District Contact	Kurt Arends karends@valleywater.org

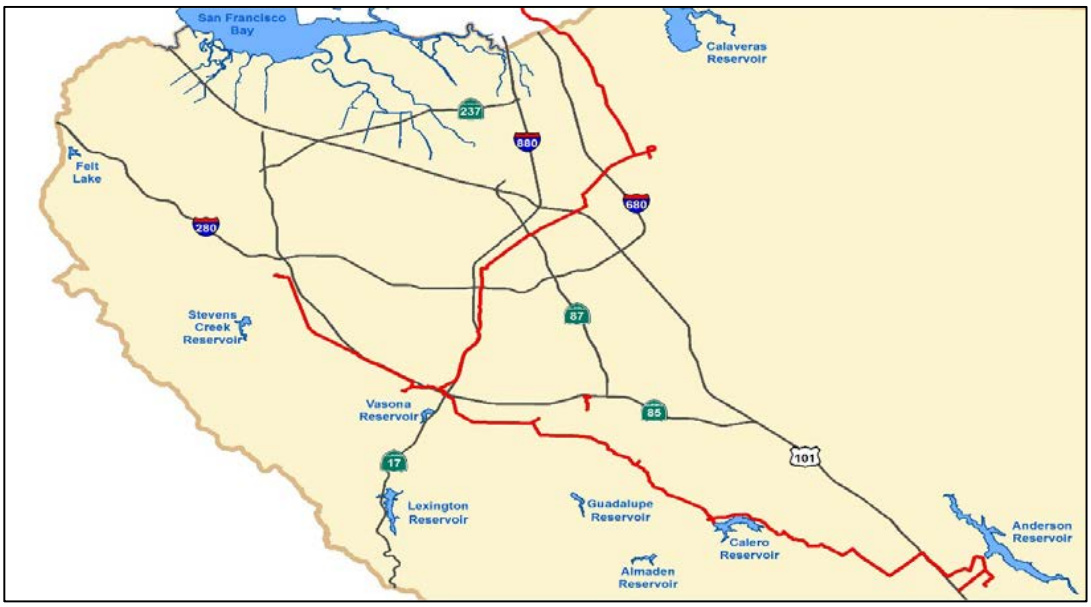
Major repair and replacement of turnout roofs and similar small raw water capital projects will be completed in accordance with the asset management plan.

PROJECT DESCRIPTION

This project provides resources for the improvement of small capital investments that replace or extend the life of an asset. This project will repair or rehabilitate various existing raw water distribution facilities. These activities include identifying and fixing corrosion problems, replacing valves and other appurtenances and modifying water recharge facilities to avoid failure of the raw water transmission system and extend the life of the infrastructure. This project is part of the District's 10-year asset management program. Planned projects for FY 20 include:

- Pay Valley Habitat Fees for long-term permitting.
- Fix turnout roofs.
- Purchase spare parts for inventory.
- Video inspection of South County recycled water pipeline.

PROJECT LOCATION



Project Location

SCHEDULE & STATUS

This project is part of a regularly scheduled 10-year maintenance and asset management program.

Traditional planning, design, and construction phases do not apply.

Phase	Cost
Plan	n/a
Design	n/a
Construct	n/a
Closeout	n/a
	n/a

FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY18	FY19	FY20	FY21	FY22	FY23	FY24	Future	
92764009-Small Capital Improvements, Raw Water Transmission	n/a	849	1,215	30	119	0	209	1,504	3,926
with inflation	n/a	849	1,215	33	136	0	260	2,097	4,590

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY18	FY19		FY20	FY21	FY22	FY23	FY24	Future	
92764009-Small Capital Improvements, Raw Water Transmission	n/a	849	0	1,215	33	136	0	260	2,097	4,590

Adjusted Budget includes adopted budget plus approved budget adjustments. Small Capital Improvement projects do not carry forward unspent funds from one fiscal year to the next. Unspent funds are returned to fund reserves at the close of each fiscal year and new funding is provided in the next fiscal year.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	4,590
Other Funding Source	0
Total	**4,590**

OPERATING COST IMPACTS

The completion of this project is not anticipated to increase or decrease annual operating costs, as the project does not significantly alter the existing facilities or modes of operation.

USEFUL LIFE: Not Available

Project	**Small Capital Improvements, Treated Water Transmission**
Program	Water Supply – Transmission
Priority No.	73
Project No.	94764006
District Contact	Kurt Arends karends@valleywater.org

Valve installation in the Piedmont Line Valve Vault; Similar small capital projects will be carried out at treated water transmission facilities according to the asset management plan.

PROJECT DESCRIPTION

This project provides resources for the improvement of small capital investments that replace or extend the life of an asset. This project will repair or rehabilitate various existing treated water distribution facilities, such as identifying and treating corrosion problems, replacing valves and other appurtenances and repairing or adding turnouts to avoid failure of the treated water transmission system and to extend the life of the infrastructure. This project is part of the District's 10-year asset management program. Planned projects for FY20 include:

- Treated water meter replacements.

PROJECT LOCATION

Project Location

SCHEDULE & STATUS

This project is part of a regularly scheduled 10-year maintenance and asset management program.

Traditional planning, design, and construction phases do not apply.

Phase	Cost
Plan	n/a
Design	n/a
Construct	n/a
Closeout	n/a
	n/a

FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY18	FY19	FY20	FY21	FY22	FY23	FY24	Future	
94764006-Small Capital Improvements, Treated Water Transmission	n/a	0	178	54	178	150	60	140	760
with inflation	n/a	0	178	59	203	179	75	200	893

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY18	FY19		FY20	FY21	FY22	FY23	FY24	Future	
94764006-Small Capital Improvements, Treated Water Transmission	n/a	0	0	178	59	203	179	75	200	893

Adjusted Budget includes adopted budget plus approved budget adjustments. Small Capital Improvement projects do not carry forward unspent funds from one fiscal year to the next. Unspent funds are returned to fund reserves at the close of each fiscal year and new funding is provided in the next fiscal year.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	893
Other Funding Source	0
Total	**893**

OPERATING COST IMPACTS

The completion of this project is not anticipated to increase or decrease annual operating costs, as the project does not significantly alter the existing facilities or modes of operation.

USEFUL LIFE: Not Available

Project	**Treated Water Isolation Valves**
Program	Water Supply – Transmission
Priority No.	62
Project No.	94084007
District Contact	Katherine Oven KOven@valleywater.org

New line valves similar to this will be installed at three locations within the treated water system.

PROJECT DESCRIPTION

This project plans, designs, and constructs three (3) additional line valve appurtenances to accomplish the following objectives:

- Improve service levels to treated water system customers in a major hazard event or system outage.
- Improve the District's ability to take sections of the treated water distribution system out of service for maintenance activities.

PROJECT LOCATION

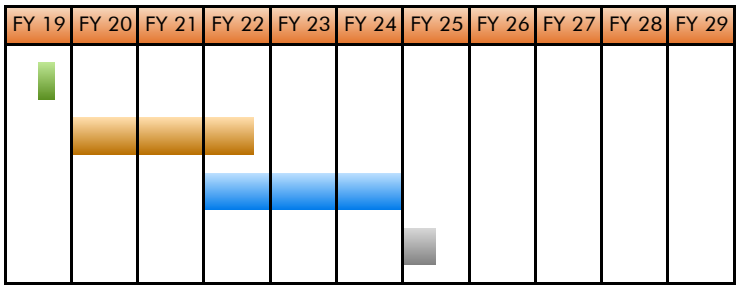
★ Project Location

SCHEDULE & STATUS

December 2018 to December 2024

Line valve construction to be coordinated with other pipeline maintenance and rehabilitation projects.

Phase	Cost
Plan	162
Design	1,126
Construct	6,116
Closeout	53
	7,457



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY18	FY19	FY20	FY21	FY22	FY23	FY24	Future	
94084007-Treated Water Isolation Valves	0	14	1,257	79	2,018	2,018	2,018	53	7,457
with inflation	0	14	1,257	86	2,229	2,304	2,382	69	8,340

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY18	FY19		FY20	FY21	FY22	FY23	FY24	Future	
94084007-Treated Water Isolation Valves	0	529	515	742	86	2,229	2,304	2,382	69	8,340

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	8,340
Other Funding Sources	0
Total	**8,340**

OPERATING COST IMPACTS

The operating budget impact for the three proposed line valve facilities is estimated to be $21,000 per year beginning in FY22.

USEFUL LIFE: 50 Years

Project	**Vasona Pump Station Upgrade**
Program	Water Supply – Transmission
Priority No.	67
Project No.	92264001
District Contact	Katherine Oven KOven@valleywater.org

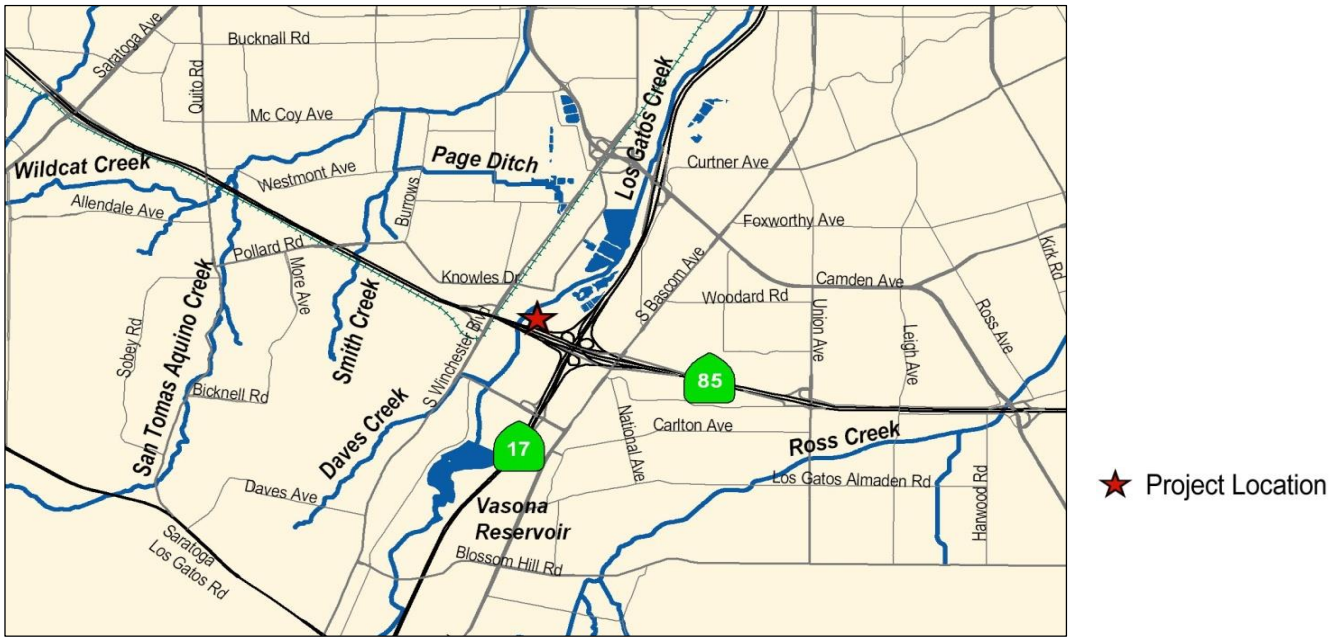
Vasona Pumping Plant pump

PROJECT DESCRIPTION

This project plans, designs, and constructs improvements to the Vasona Pump Station, including replacing aging pumps, motors, drives, valves, actuators, and electrical and control systems that have reached the end of their useful life; and adding one redundant pump. The project will accomplish the following objectives:

- Eliminate the risk of failure by replacing assets that have reached the end of their useful life, including four pumps (two 200 horsepower, two 400 horsepower) and associated motors, drives, electrical and control systems, as well as pump discharge and suction valves and actuators.
- Increase operational flexibility and prepare for future capacity needs by adding one redundant pump and increasing the size of the two 200 horsepower pumps.

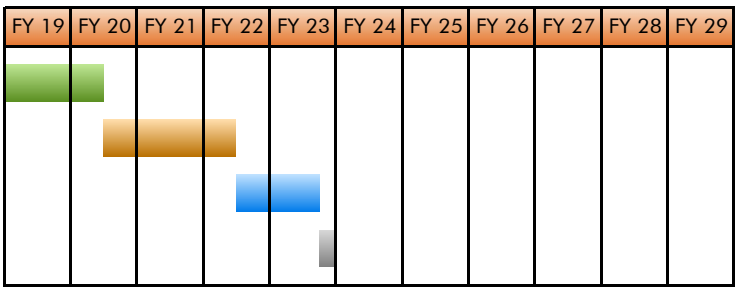
PROJECT LOCATION



SCHEDULE & STATUS

July 2017 to June 2023

Phase	Cost
Plan	1,468
Design	1,771
Construct	19,100
Closeout	70
	22,426



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY18	FY19	FY20	FY21	FY22	FY23	FY24	Future	
92264001-Vasona Pump Station Upgrade	244	1,135	526	1,351	18,700	470	0	0	22,426
with inflation	244	1,135	526	1,475	20,487	560	0	0	24,428

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY18	FY19		FY20	FY21	FY22	FY23	FY24	Future	
92264001-Vasona Pump Station Upgrade	831	549	1	525	1,475	20,487	560	0	0	24,428

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	24,428
Other Funding Sources	0
Total	24,428

OPERATING COST IMPACTS

The completion of this project is anticipated to increase operating costs by approximately $70,000 per year beginning in FY 2023.

USEFUL LIFE: 50 Years

Project	**Westside Retailer Interties**
Program	Water Supply – Transmission
Priority No.	76
Project No.	94084008
District Contact	Katherine Oven KOven@valleywater.org

New interties similar to this will be installed in the cities of Santa Clara and Mountain View.

PROJECT DESCRIPTION

This project plans, designs, and constructs two new retailer interties and associated appurtenances, structures, and controls in the cities of Santa Clara and Mountain View. The project will accomplish the following objectives:

- Improve service levels to the West treated water system customers in a major hazard event or system outage.
- Improve the District's ability to take sections of the West treated water distribution system out of service for maintenance activities.

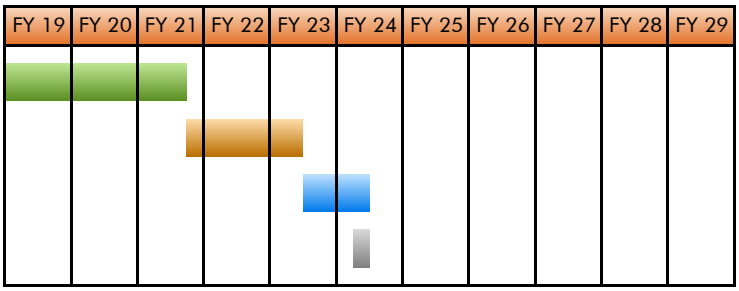
PROJECT LOCATION

★ Project Location

SCHEDULE & STATUS

April 2018 to November 2023

Phase	Cost
Plan	137
Design	393
Construct	1,250
Closeout	24
	1,807



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY18	FY19	FY20	FY21	FY22	FY23	FY24	Future	
94084008-Westside Retailer Interties	29	45	6	64	328	1,239	96	0	1,807
with inflation	29	45	6	70	374	1,417	120	0	2,061

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY18	FY19		FY20	FY21	FY22	FY23	FY24	Future	
94084008-Westside Retailer Interties	80	67	73	0	3	374	1,417	120	0	2,061

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	2,061
Other Funding Sources	0
Total	2,061

OPERATING COST IMPACTS

The operating budget impact for the two proposed Interties is estimated to be $11,000 per year beginning in FY22.

USEFUL LIFE: 50 Years

Treatment Facilities

Treatment Facilities

- 3 Treatment Plants
- 7 Capital Projects

Project PWTP Residuals Management
Program Water Supply - Treatment **Priority No.** 74
District Contact Katherine Oven KOven@valleywater.org **Project No.** 93234044

Existing settling pond and residuals building to be replaced with new residuals management facility

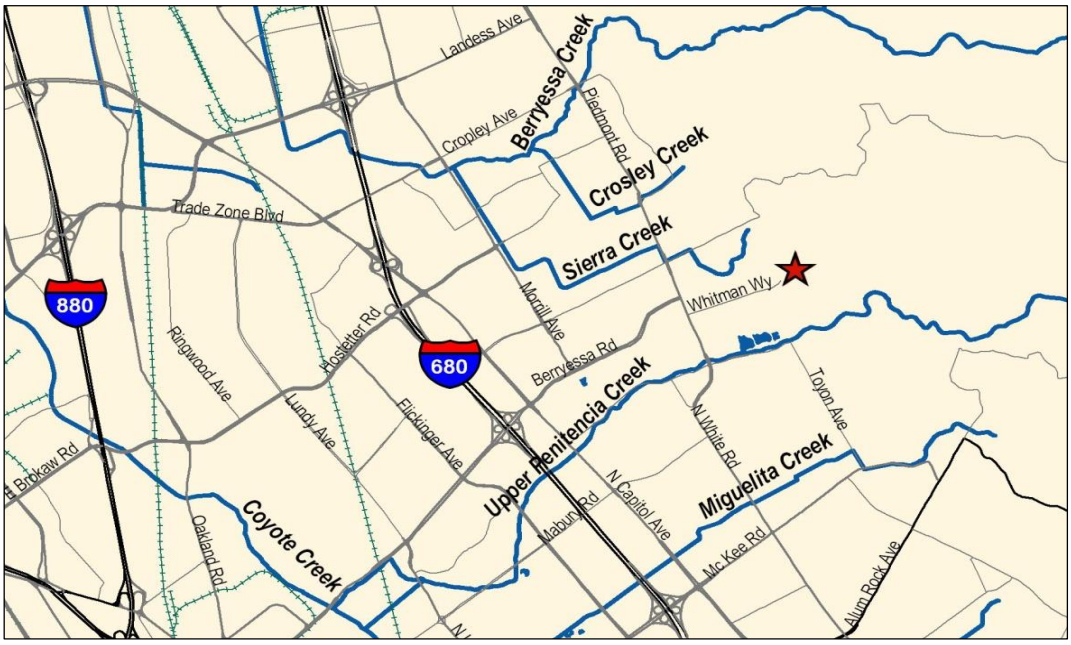
Existing belt press to be replaced with new residuals management facility

PROJECT DESCRIPTION

This project plans, designs, and constructs modifications to the Penitencia Water Treatment Plant (PWTP) residuals management process to accomplish the following objectives:

- Extend the useful life of the treatment plant.
- Improve the efficiency of the residual management processes.
- Minimize or eliminate (existing) operational constraints and impacts to the drinking water treatment process.
- Minimize risk of discharge violations.
- Improve the reliability of PWTP.

PROJECT LOCATION

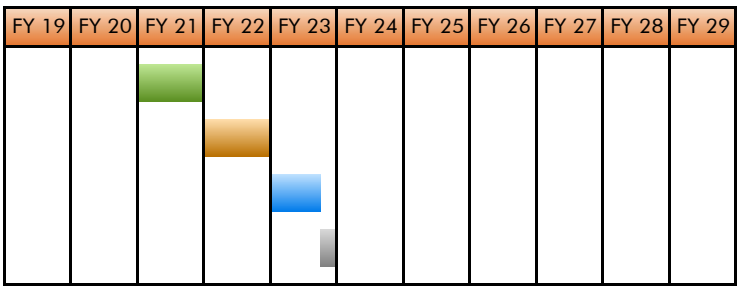


★ Project Location

SCHEDULE & STATUS

July 2020 to June 2023

Phase	Cost
Plan	650
Design	1,300
Construct	6,925
Closeout	-
	8,875



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY18	FY19	FY20	FY21	FY22	FY23	FY24	Future	
93234044-PWTP Residuals Management	0	0	0	650	1,300	6,925	0	0	8,875
with inflation	0	0	0	710	1,484	7,856	0	0	10,049

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY18	FY19		FY20	FY21	FY22	FY23	FY24	Future	
93234044-PWTP Residuals Management	0	0	0	0	710	1,484	7,856	0	0	10,049

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	10,049
Other Funding Sources	0
Total	10,049

OPERATING COST IMPACTS

Operating cost impacts will be determined during the construction phase.

USEFUL LIFE: Not Available

Project RWTP Residuals Remediation
Program Water Supply - Treatment **Priority No.** 84
District Contact Katherine Oven KOven@valleywater.org **Project No.** 93294051s

Centrifuge for mechanical dewatering of sludge

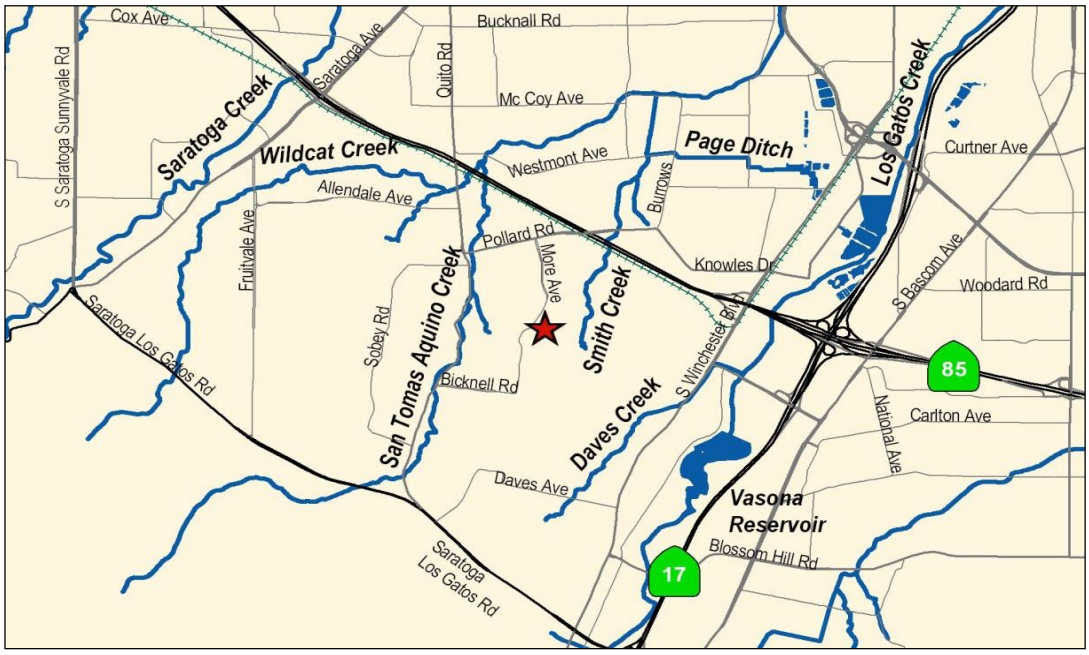
New gravity thickeners and mix tank for sludge thickening and blending

PROJECT DESCRIPTION

This project plans, designs, and constructs modifications to the Rinconada Water Treatment Plant (RWTP) residuals management processes and will accomplish the following objectives:

- Extend the useful life of the treatment plant.
- Improve the efficiency of the residual management processes.
- Minimize risk of discharge violations.
- Improve the reliability of RWTP.

PROJECT LOCATION

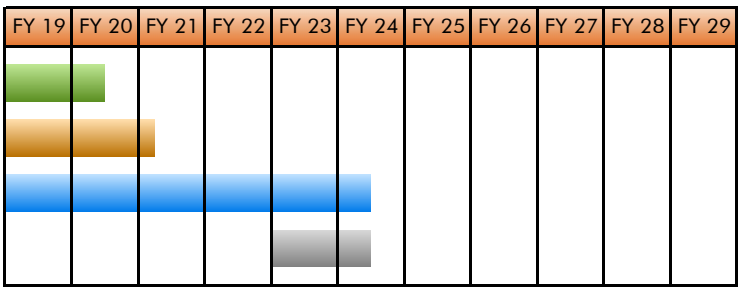


★ Project Location

SCHEDULE & STATUS

July 2008 to December 2023

Phase	Cost
Plan	2,137
Design	7,100
Construct	44,982
Closeout	230
	58,243



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY18	FY19	FY20	FY21	FY22	FY23	FY24	Future	
93294051-RWTP FRP Residuals Management	30,656	1,700	261	0	0	0	0	0	32,617
with inflation	30,656	1,700	261	0	0	0	0	0	32,617
93294058-RWTP Residuals Remediation	3,306	1,692	2,635	13,573	1,630	2,235	555	0	25,626
with inflation	3,306	1,692	2,635	14,480	1,860	2,632	692	0	27,296
TOTAL	**33,962**	**3,392**	**2,896**	**13,573**	**1,630**	**2,235**	**555**	**0**	**58,243**
with inflation	**33,962**	**3,392**	**2,896**	**14,480**	**1,860**	**2,632**	**692**	**0**	**59,913**

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY18	FY19		FY20	FY21	FY22	FY23	FY24	Future	
93294051-RWTP FRP Residuals Management	38,573	0	6,217	0	0	0	0	0	0	38,573
93294058-RWTP Residuals Remediation	5,000	0	2	2,633	14,480	1,860	2,632	692	0	27,296
TOTAL	43,573	0	6,219	2,633	14,480	1,860	2,632	692	0	65,869

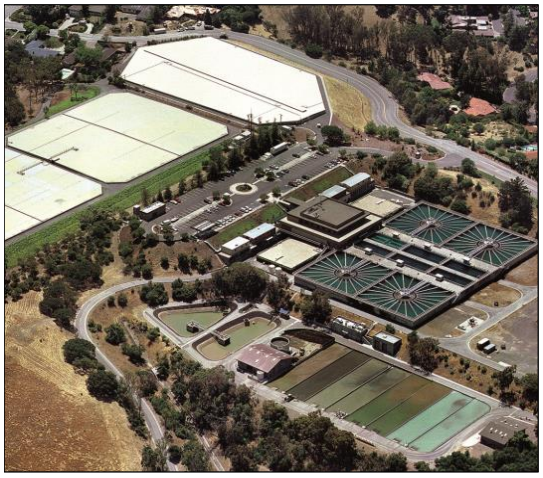
Adjusted Budget includes adopted budget plus approved budget adjustments. Funding exceeds planned expenditures by approximately $5,956,000. Excess funding will be returned to reserves upon completionof the project.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	65,869
Other Funding Source	0
Total	**65,869**

Project **RWTP Reliability Improvement**
Program Water Supply - Treatment **Priority No.** 91
District Contact **Katherine Oven** KOven@valleywater.org **Project No.** 93294057



Aerial view of the
Rinconada Water Treatment Plant facing west

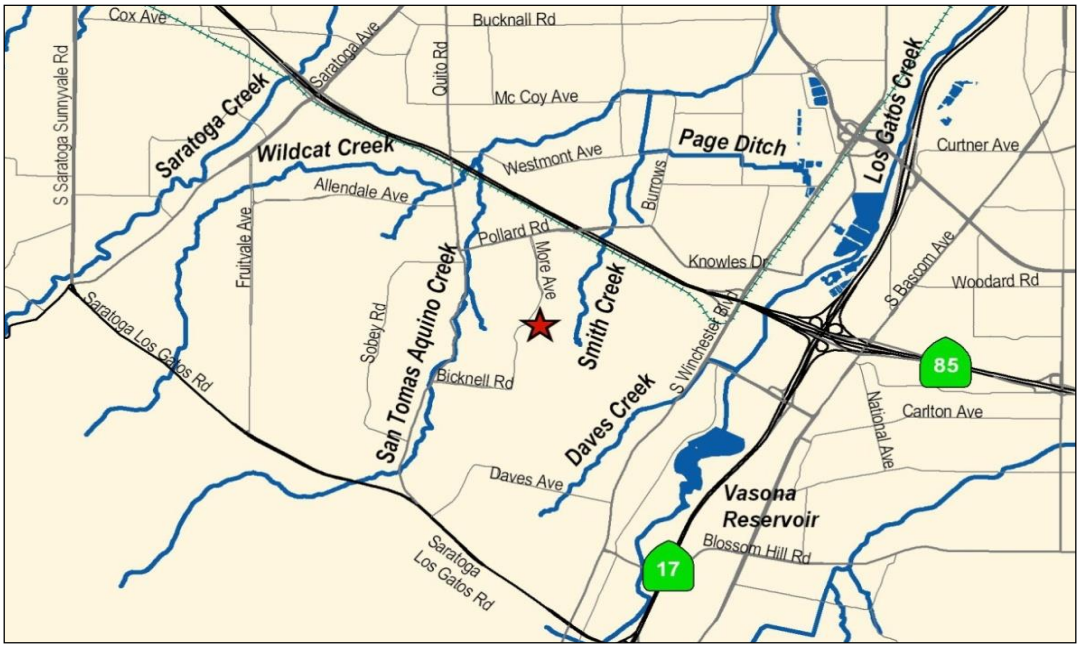
Artist rendering of the aerial view of the Rinconada
Water Treatment Plant facing south after construction

PROJECT DESCRIPTION

This project plans, designs, and constructs new facilities at Rinconada Water Treatment Plant (RWTP) that will improve plant reliability by accomplishing the following objectives:

- Construct a new raw water ozonation facility.
- Construct a new flocculation and plate settler clarification facility.
- Implement a dual media filtration system.
- Increase plant capacity to 100 million gallons per day (MGD).

PROJECT LOCATION

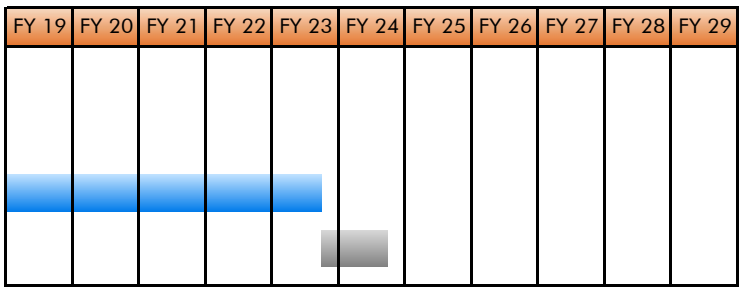


★ Project Location

SCHEDULE & STATUS

July 2009 to December 2022

Phase	Cost
Plan	1,925
Design	19,766
Construct	252,259
Closeout	120
	305,274



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY18	FY19	FY20	FY21	FY22	FY23	FY24	Future	
93294057-RWTP Reliability Improvement	163,985	22,920	25,258	47,365	32,792	12,864	90	0	305,274
with inflation	163,985	22,920	25,258	48,664	33,957	13,817	112	0	308,714

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY18	FY19		FY20	FY21	FY22	FY23	FY24	Future	
93294057-RWTP Reliability Improvement	164,365	33,232	10,692	14,566	48,664	33,957	13,817	112	0	308,714

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	308,714
Other Funding Source	0
Total	**308,714**

OPERATING COST IMPACTS

The completion of this project is anticipated to increase operating costs by approximately $1.4 million per year, beginning in FY 2023. Increases are for routine maintenance and operation of new equipment.

USEFUL LIFE:

Media – 20 Years, Structures – 50 Years, Equipment – 15 Years

Project	**RWTP Treated Water Valves Upgrade**
Program	Water Supply – Treatment
Priority No.	84
Project No.	93294056
District Contact	Katherine Oven KOven@valleywater.org

Example of a valve to be replaced or upgraded

PROJECT DESCRIPTION

This project plans, designs, and constructs modifications to the Rinconada Water Treatment Plant (RWTP), including seismically strengthening the chemical storage structures; replacing/upgrading the valves and appurtenances used to control treated water at the clearwells and the Ronconada Reservoir; repairing a damaged baffle wall in the Rinconada Reservoir; and installing a 48-inch magnetic flow meter on the treatment plant's treated water effluent pipeline. Consistent with the Facility Renewal Program (FRP), this project will accomplish the following objectives:

- Ensure plant operational reliability.
- Improve ability to maintain the plant.
- Allow for better isolation of the treated water control valves for future work.
- Achieve greater accuracy in measuring treated water deliveries.
- Restore existing landscaping after drought.

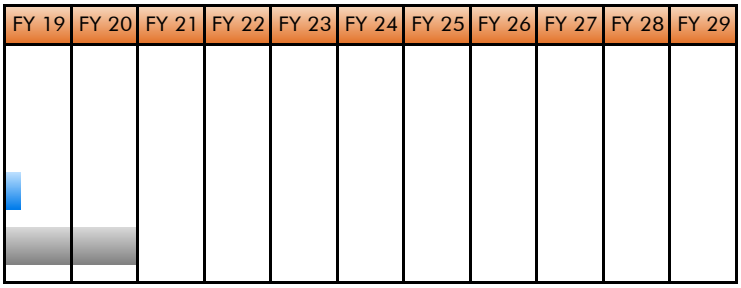
PROJECT LOCATION

★ Project Location

SCHEDULE & STATUS

July 2009 to June 2020

Phase	Cost
Plan	465
Design	1,479
Construct	6,654
Closeout	21
	8,623



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY18	FY19	FY20	FY21	FY22	FY23	FY24	Future	
93294056-RWTP Treated Water Valves Upgrade	8,240	362	21	0	0	0	0	0	8,623
with inflation	8,240	362	21	0	0	0	0	0	8,623

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY18	FY19		FY20	FY21	FY22	FY23	FY24	Future	
93294056-RWTP Treated Water Valves Upgrade	8,594	8	0	21	0	0	0	0	0	8,623

Adjusted Budget includes adopted budget plus approved budget adjustments

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	8,623
Other Funding Source	0
Total	8,623

OPERATING COST IMPACTS

The completion of this project is not anticipated to increase or decrease annual operating costs, as the project does not significantly alter the existing facilities or modes of operations.

USEFUL LIFE: 40 Years

Project	**Small Capital Improvements, Water Treatment**
Program	Water Supply – Treatment
Priority No.	73
Project No.	93764004
District Contact	Bhavani Yerrapotu byerrapotu@valleywater.org

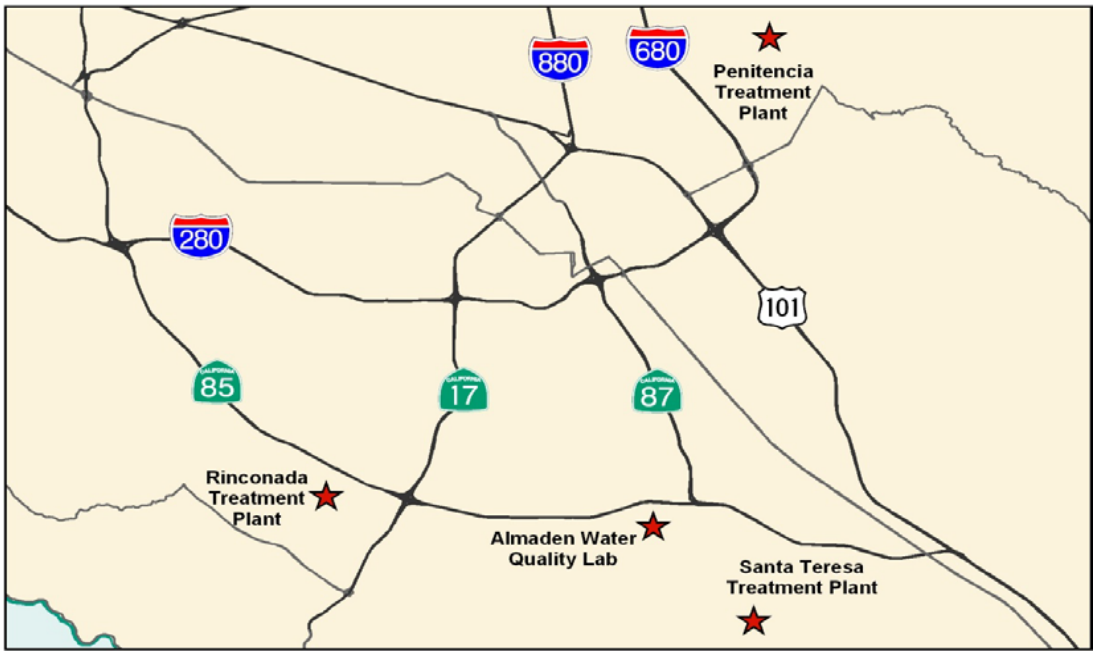
Sludge pond sediment removal at Santa Teresa Water Treatment Plant

PROJECT DESCRIPTION

This project provides resources for small capital improvements that replace or extend the life of an asset. This project implements a systematic approach of equipment replacement and renewal at the three water treatment plants and laboratory by designing and constructing improvements identified as part of the District's 10-year asset management program. Typical activities included in this project include pump, motor, instrumentation and valve replacement; chemical tank repairs; and large-scale renewal and replacement activities like clarifier mechanism overhaul and replacement. Planned projects to complete for Santa Teresa Water Treatment Plant (STWTP), Penitencia Water Treatment Plan (PWTP), Rinconada Water Treatment Plant (RWTP), West Pipeline, and Silicon Valley Advanced Water Purification Center (SVAWPC) include:

- Provide engineering, supplies, and services support for the Sulfuric Acid Water Quality project.
- Purchase Laboratory Information Management System (LIMS).
- Complete Small Capital Projects at STWTP, RWTP, PWTP and Campbell Well Field.

PROJECT LOCATION



★ Project Location

SCHEDULE & STATUS

This project is part of a regularly scheduled 10-year maintenance and asset management program.

Traditional planning, design, and construction phases do not apply.

Phase	Cost
Plan	n/a
Design	n/a
Construct	n/a
Closeout	n/a
	n/a

FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY18	FY19	FY20	FY21	FY22	FY23	FY24	Future	
93764004-Small Capital Improvements, Water Treatment	n/a	3,578	11,353	2,774	3,330	860	4,729	20,435	47,059
with inflation	n/a	3,578	11,353	3,029	3,800	1,026	5,893	30,355	59,034

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY18	FY19		FY20	FY21	FY22	FY23	FY24	Future	
93764004-Small Capital Improvements, Water Treatment	n/a	3,577	0	11,353	3,029	3,800	1,026	5,893	30,355	59,033

Adjusted Budget includes adopted budget plus approved budget adjustments. Small Capital Improvement projects do not carry forward unspent funds from one fiscal year to the next. Excess funds are returned to fund reserves at the close of each fiscal year and new funding is provided in the next fiscal year.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	59,033
Other Funding Source	0
Total	59,033

OPERATING COST IMPACTS

The completion of this project is not anticipated to increase or decrease annual operating costs, as the project does not significantly alter the existing facilities or modes of operation.

USEFUL LIFE: Not Available

Project	**STWTP Filter Media Replacement**
Program	Water Supply - Treatment
Priority No.	65
Project No.	93284013
District Contact	Katherine Oven KOven@valleywater.org

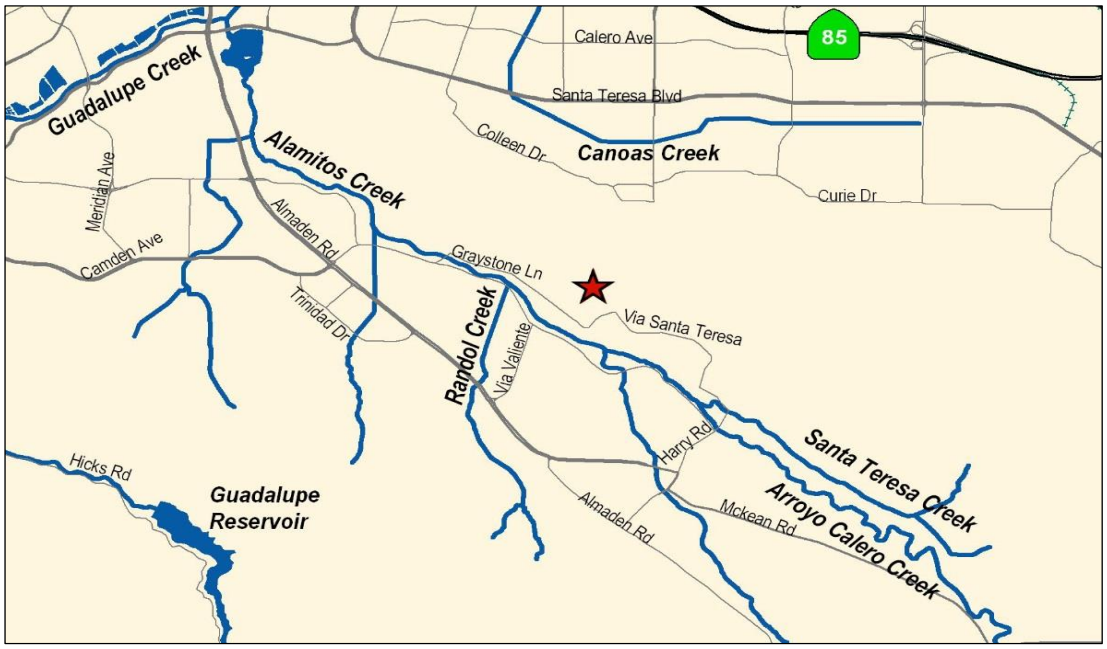
Santa Teresa Water Treatment Plant Filter Media Replacement

PROJECT DESCRIPTION

This project plans, designs and constructs improvements to the Santa Teresa Water Treatment Plant (STWTP) filter basins to ensure that STWTP maintains its operational capacity and continues to effectively serve customers, retailers and the public with safe and high-quality drinking water. This project will accomplish the following objectives:

- Extend the service life of STWTP filter media.
- Replace the filter media in all twelve filters with sand and Granular Activated Carbon (GAC).
- Replace the filter's damaged or deteriorated collection nozzles.

PROJECT LOCATION

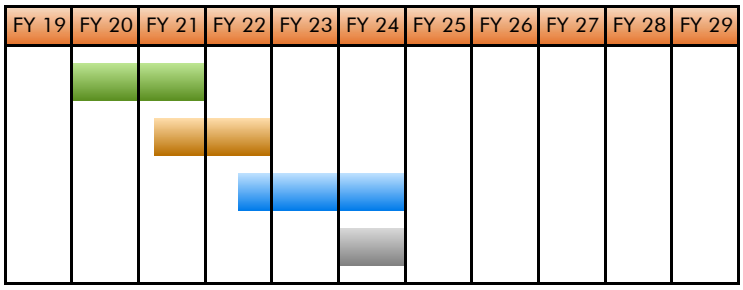


★ Project Location

SCHEDULE & STATUS

July 2019 to June 2024

Phase	Cost
Plan	798
Design	961
Construct	7,648
Closeout	75
	9,482



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY18	FY19	FY20	FY21	FY22	FY23	FY24	Future	
93284013-STWTP Filter Media Replacement	0	0	203	1,080	2,021	4,611	1,567	0	9,482
with inflation	0	0	203	1,179	2,242	5,234	1,845	0	10,703

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY18	FY19		FY20	FY21	FY22	FY23	FY24	Future	
93284013-STWTP Filter Media Replacement			0	203	1,179	2,242	5,234	1,845	0	10,703

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	10,703
Other Funding Sources	0
Total	10,703

OPERATING COST IMPACTS

N/A

USEFUL LIFE: N/A

Project	**Water Treatment Plant Electrical Improvement**
Program	Water Supply - Treatment
Priority No.	79
Project No.	93084004
District Contact	Katherine Oven KOven@valleywater.org

MCC Switchboard

PROJECT DESCRIPTION

This project plans, designs, and constructs improvements to the electrical equipment at Penitencia Water Treatment Plant (PWTP) and Santa Teresa Water Treatment Plant (STWTP). The standby generator will be upgraded at STWTP. This project will accomplish the following objectives:

- Extend the service life of PWTP's and STWTP's electrical distribution systems
- Improve reliability and reduce maintenace at PWTP and STWTP

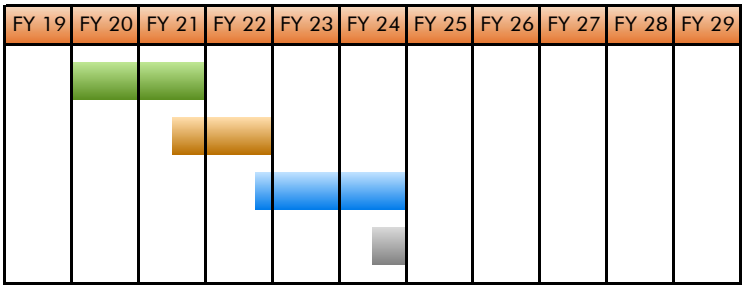
PROJECT LOCATION

★ Project Location

SCHEDULE & STATUS

July 2019 to June 2024

Phase	Cost
Plan	878
Design	1,092
Construct	8,839
Closeout	75
	10,884



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY18	FY19	FY20	FY21	FY22	FY23	FY24	Future	
93084004-Water Treatment Plant Electrical Improvement	0	0	203	1,227	2,323	5,328	1,803	0	10,884
with inflation	0	0	203	1,340	2,574	6,036	2,116	0	12,269

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY18	FY19		FY20	FY21	FY22	FY23	FY24	Future	
93084004-Water Treatment Plant Electrical Improvement			0	203	1,340	2,574	6,036	2,116	0	12,269

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

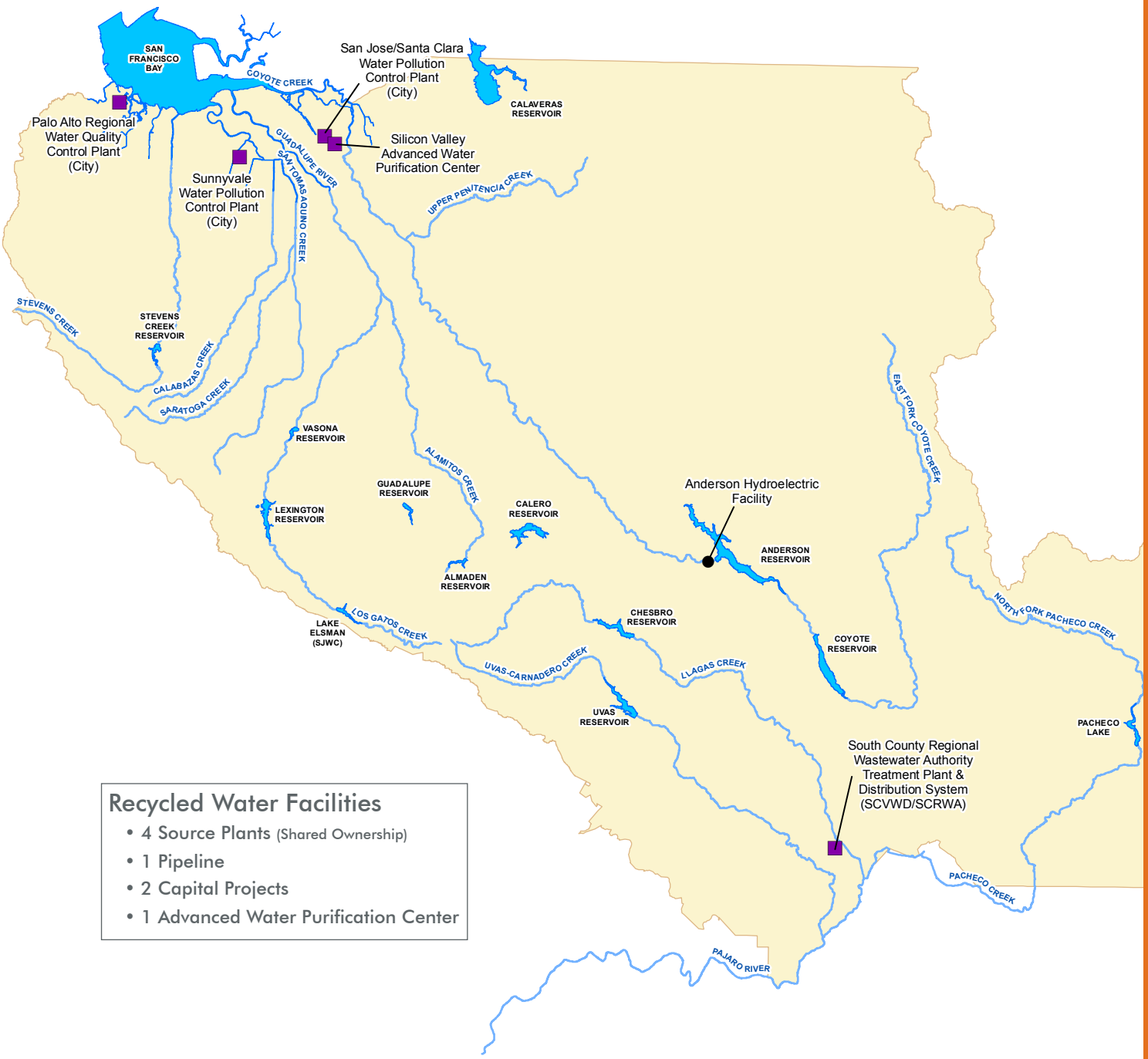
SCVWD Water Utility Enterprise Fund	12,269
Other Funding Sources	0
Total	12,269

OPERATING COST IMPACTS

N/A

USEFUL LIFE: N/A

Recycled & Purified Water Facilities



Recycled Water Facilities

- 4 Source Plants (Shared Ownership)
- 1 Pipeline
- 2 Capital Projects
- 1 Advanced Water Purification Center

Project	**Expedited Purified Water Program**
Program	Water Supply – Recycled Water
Priority No.	71
Project No.	91304001s
District Contact	Katherine Oven koven@valleywater.org

Reverse osmosis membranes used for water purification

PROJECT DESCRIPTION

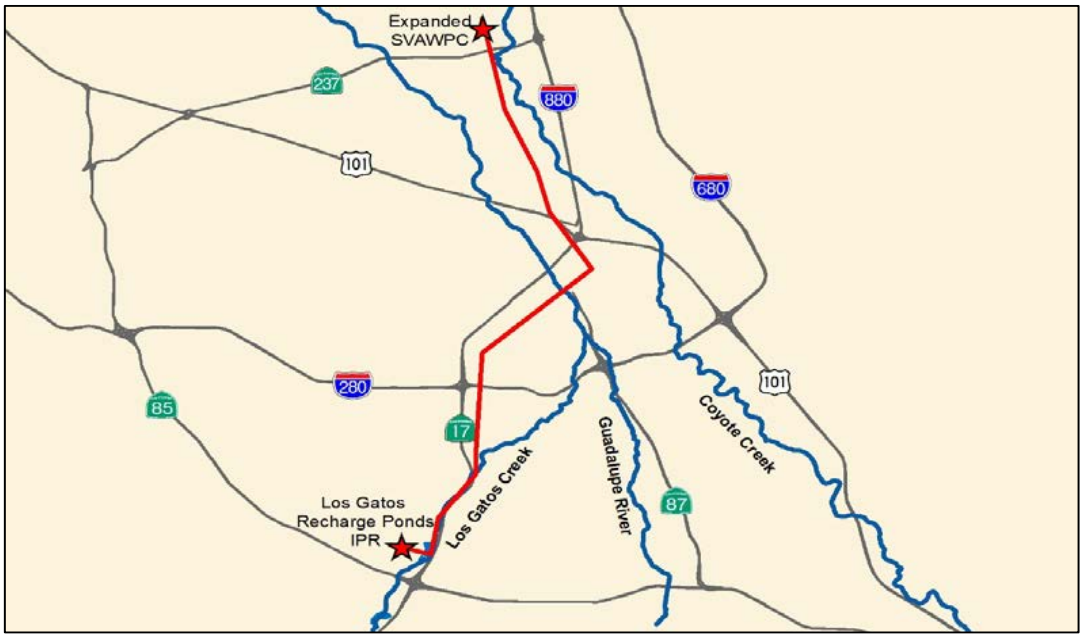
This project plans, designs, and constructs new infrastructure, proposed in the District's 2012 Water Supply Master Plan, using a P3 delivery method, to accomplish the following objectives:

- Expand the District's long-term water supply portfolio.
- Ensure a drought-proof and reliable water supply for Silicon Valley.

Project elements may include, but are not limited to:

- Expansion of the Silicon Valley Advanced Water Purification Center to produce up to an additional 24 million gallons per day (MGD) of advanced purified water.
- Installation of pipelines to convey advanced purified water to the District's existing groundwater recharge ponds for indirect potable reuse, or to the District's conventional surface water treatment plants for use as raw water augmentation (direct potable reuse).
- Installation of purified water injection wells at strategic locations to improve groundwater basin management.

PROJECT LOCATION



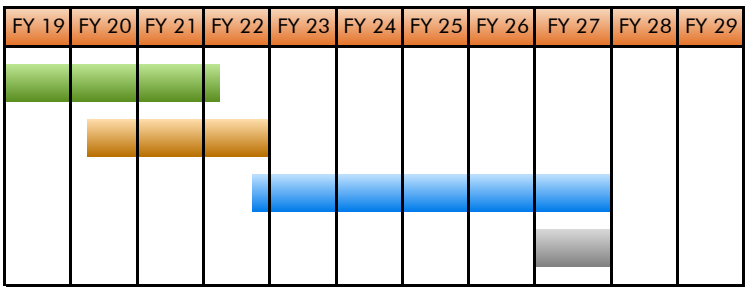
★ Project Location

SCHEDULE & STATUS

April 2015 to June 2027

This project will be designed and constructed through a P3 delivery method.

Phase	Cost
Plan	22,124
Design	460
Construct	152,647
Closeout	-
	183,987



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**Future**	
91304001 - Indirect Potable Water Reuse Projects - Planning	18,325	5,325	2,480	3,438	2,005	5,000	10,000	136,900	183,473
with inflation	18,325	5,325	2,480	3,754	2,288	5,628	11,593	169,710	219,103
91284009 - Silicon Valley Advanced Water Purification Center Expansion	479	0	0	0	0	0	0	0	479
with inflation	479	0	0	0	0	0	0	0	479
91384001 - Purified Water Pipelines	35	0	0	0	0	0	0	0	35
with inflation	35	0	0	0	0	0	0	0	35
TOTAL	**18,839**	**5,325**	**2,480**	**3,438**	**2,005**	**5,000**	**10,000**	**136,900**	**183,987**
with inflation	**18,839**	**5,325**	**2,480**	**3,754**	**2,288**	**5,628**	**11,593**	**169,710**	**219,617**

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	**FY18**	**FY19**		**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**Future**	
91304001 - Indirect Potable Water Reuse Projects - Planning	19,210	4,440	0	2,480	3,754	2,288	5,628	11,593	169,710	219,103
91284009 - Silicon Valley Advanced Water Purification Center Expansion	910	0	431	0	0	0	0	0	0	910
91384001 - Purified Water Pipelines	256	0	221	0	0	0	0	0	0	256
TOTAL	**20,376**	**4,440**	**652**	**2,480**	**3,754**	**2,288**	**5,628**	**11,593**	**169,710**	**220,269**

Adjusted Budget includes adopted budget plus a planned budget adjustments. Funding exceeds planned expenditures by approximately $652,000. Excess funding will be returned to reserves upon completion of the project.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	220,269
Other Funding Sources	0
Total	**220,269**

OPERATING COST IMPACTS

Operating cost impacts are anticipated and will be determined during the planning phase.

USEFUL LIFE: Not Available

Project	**South County Recycled Water Pipeline**
Program	Water Supply – Recycled Water
Priority No.	52
Project No.	91094007s
District Contact	Katherine Oven KOven@valleywater.org

Purple recycled water pipe waiting to be laid during construction of Immediate Term project

PROJECT DESCRIPTION

This project plans, designs, and constructs water recycling systems based on the South County Recycled Water Master Plan accepted in December 2004 to improve system redundancy, reliability, and capacity. The current Master Plan report presents a 20-year capital program for expanding water recycling in South County in three phases; Immediate Term, Short Term, and Long Term:

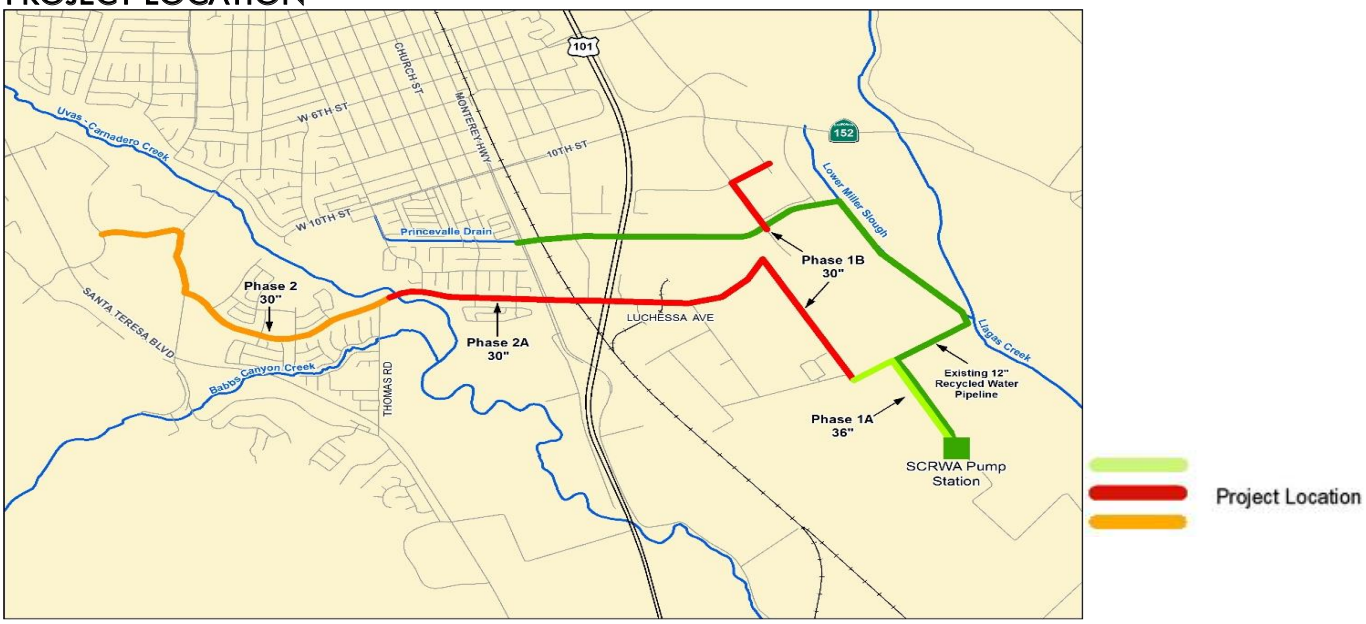
Completed:

- 91094007 Recycled Water South County Masterplan (Immediate Term) which included design and construction of recycled water storage, pumping, and distribution facilities for agricultural use near the SCRWA treatment plant.
- 91094008 Recycled Water South County Masterplan (Short Term 1A), installation of approximately 3,000 feet of 30-inch and 36-inch pipeline.

Currently Underway:

- 91094009 South County Recycled Water Pipeline (Short Term) Phase 1B will construct an additional 14,000 linear feet of pipeline.
- 91094010 South County Recycled Water Pipeline (Short Term) Phase 2 will be completed through cost-sharing opportunities with the City of Gilroy and land developers to construct approximately 3,900 linear feet of 30-inch diameter pipe.
- 91094010 South County Recycled Water Pipeline (Long Term) Phase 1 to be completed through cost-sharing opportunities with the land developers through coordination by the City of Gilroy to construct approximately 9,200 linear feet of 24-inch diameter pipe.

PROJECT LOCATION

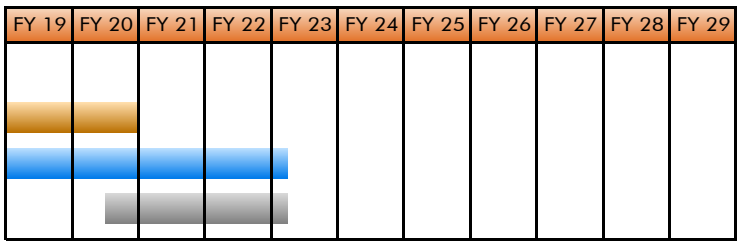


SCHEDULE & STATUS

July 2009 to September 2022

The schedule chart shows Short-Term Phase 1B and Phase 2 projects only. The Immediate-Term and Short-Term Phase 1A projects are complete.

Phase	Cost
Plan	3,082
Design	10,879
Construct	37,305
Closeout	155
	55,831



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY18	FY19	FY20	FY21	FY22	FY23	FY24	Future	
91094007-Recycled Water South County Masterplan - Immediate Term	3,257	0	0	0	0	0	0	0	3,257
with inflation	3,257	0	0	0	0	0	0	0	3,257
91094008-Recycled Water South County Masterplan - Short Term 1A	5,391	0	0	0	0	0	0	0	5,391
with inflation	5,391	0	0	0	0	0	0	0	5,391
91094009-South County Recycled Water Pipeline - Short Term 1B	9,721	205	1,793	16,676	10,800	0	0	0	39,195
with inflation	9,721	205	1,793	17,759	11,581	0	0	0	41,059
91094010-South County Recycled Water Pipeline - Short Term 2	7,325	262	401	0	0	0	0	0	7,988
with inflation	7,325	262	401	0	0	0	0	0	7,988
TOTAL	**25,694**	**467**	**2,194**	**16,676**	**10,800**	**0**	**0**	**0**	**55,831**
with inflation	**25,694**	**467**	**2,194**	**17,759**	**11,581**	**0**	**0**	**0**	**57,695**

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY18	FY19		FY20	FY21	FY22	FY23	FY24	Future	
91094007-Recycled Water South County Masterplan - Immediate Term	3,257	0	0	0	0	0	0	0	0	3,257
91094008-Recycled Water South County Masterplan - Short Term 1A	5,391	0	0	0	0	0	0	0	0	5,391
91094009-South County Recycled Water Pipeline - Short Term 1B	19,801	0	9,875	0	9,677	11,581	0	0	0	41,059
91094010-South County Recycled Water Pipeline - Short Term 2	8,108	0	521	0	0	0	0	0	0	8,108
TOTAL	**36,557**	**0**	**10,396**	**0**	**9,677**	**11,581**	**0**	**0**	**0**	**57,815**

Adjusted Budget includes adopted budget plus approved budget adjustments. Funding exceeds planned expenditures by approximately $120,000. Excess funding will be returned to reserves upon completion of the project.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	51,709
South County Regional Wastewater Authority	811
United States Bureau of Reclamation (USBR) ARRA	1,295
United States Bureau of Reclamation (USBR) Title 16	4,000
Total	**57,815**

OPERATING COST IMPACTS

Estimated District share of the operating and maintenance costs are $8,000 per year for the Immediate-Term phase, beginning in FY 2007 and an additional $25,000 for the Short-Term Phase 1, beginning in FY 2019. Increases for Immediate Term are primarily labor costs for operating the new 3mg reservoir and its pump station. Increases for Short Term are labor and materials to maintain the 42,000 feet of new pipeline, exercising valves and cathodic protection.

USEFUL LIFE: Pipelines – 50 Years, Pumps – 20 Years

Flood Protection

Flood Protection Capital Improvements

FLOOD PROTECTION OVERVIEW

Of the approximately 800 miles of creeks in Santa Clara County, the District has jurisdiction and manages 275 miles to meet the Board's Ends Policy E–3, "There is a healthy and safe environment for residents, businesses and visitors, as well as for future generations." The district's goals are further defined in E-3.1, "Provide natural flood protection for residents, businesses, and visitors" and E-3.2, "Reduce potential for flood damages." The 275 miles of creeks are located in five watersheds: Lower Peninsula, West Valley, Guadalupe, Coyote, and Uvas/Llagas. The District administers an asset management program for its flood protection infrastructure. The program includes a schedule for maintenance and rehabilitation to ensure that each facility functions as intended throughout its useful life.

Fifty years of working for flood protection has significantly reduced the intensity and frequency of flooding in Santa Clara County. By 2005 the District had provided flood protection to 93,253 of the 166,526 parcels in the flood plain and another approximately 10,442 have been protected since then.

The voters in Santa Clara County have supported the District's flood protection efforts by approving benefit assessment funding in 1982, 1986, and 1990. Voters approved a special parcel tax in 2000 and 2012 to fund the continuation of the District's flood protection capital improvements, specifically, moving upstream from the completed downstream work or starting new work on creeks that have not had flood protection work.

Lower Peninsula Watershed

Major Capital Improvements Completed

- Adobe Creek from El Camino to West Edith Ave.
- Barron Creek
- Matadero Creek from Palo Alto Flood Basin to Barron Creek
- Stevens Creek from Highway 101 to Homestead Road

Major Capital Improvements Identified in the CIP

- Palo Alto Flood Basin Structure Improvements
- Permanente Creek from S.F. Bay to Foothill Expressway (Safe, Clean Water)
- San Francisquito Creek from S.F. Bay to Searsville Dam (Clean, Safe Creeks/Safe, Clean Water)

West Valley Watershed

Major Capital Improvements Completed

- Calabazas Creek from Guadalupe Slough to Wardell Road
- San Tomas Creek from Southern Pacific Railroad to Cabrillo Avenue
- Saratoga Creek from San Tomas Creek to Lawrence Expressway

Major Capital Improvements Identified in the CIP

- Sunnyvale East and West Channels (Clean, Safe Creeks)

Guadalupe Watershed

Major Capital Improvements Completed

- Alamitos Creek
- Guadalupe River–Lower from Alviso Marina to Interstate 880
- Guadalupe River–Downtown from Interstate 880 to Interstate 280

Major Capital Improvements Identified in the CIP

- Guadalupe River–Upper, Interstate 280 to Blossom Hill Road (Clean, Safe Creeks/Safe, Clean Water)
- Los Gatos Creek Restoration and Flood Protection (Safe, Clean Water)
- Guadalupe River, Tasman Drive to I-880

Coyote Watershed

Major Capital Improvements Completed

- Coyote Creek from S.F. Bay to Montague Expressway
- Lower Penitencia Creek from Coyote Creek to Tasman Drive
- Lower Silver Creek from Coyote Creek to Cunningham Ave. (Reaches 1-6)
- Wrigley Ford Creek

Major Capital Improvements Identified in the CIP

- Berryessa Creek from Calaveras Boulevard to Old Piedmont Road (Clean, Safe Creeks)
- Berryessa Creek from Lower Penitencia Creek to Calaveras Boulevard
- Coyote Creek Montague Expressway to Tully Road (Clean, Safe Creeks/Safe, Clean Water)
- Upper Penitencia Creek from Coyote Creek to Dorel Drive (Safe, Clean Water)

Uvas/Llagas Watershed

Major Capital Improvements Completed

- Llagas Creek–Lower from Pajaro River to Buena Vista Road
- Uvas Creek

Major Capital Improvements Identified in the CIP

- Llagas Creek Capacity Restoration from Buena Vista Road to Pajaro River
- Llagas Creek–Upper, Buena Vista Road to Llagas Road (Clean, Safe Creeks/Safe, Clean Water)

Multiple Watersheds

Major Capital Improvements Identified in the CIP

- San Francisco Bay Shoreline (Safe, Clean Water)
- Watershed Asset Rehabilitation Program

PRIORITY PROCESS AND FINANCIAL ANALYSIS

The Fiscal Year 2019-23 priority criteria for evaluating new flood protection projects were carried over to the Fiscal Year 2020-24 priority setting process to allow time for further discussions on whether changes to the criteria were needed. The priority criteria used are included in Appendix A.

A financial analysis of the Watershed and Steam Stewardship Fund and Safe, Clean Water Fund, the funding sources for flood protection capital improvements, was conducted to determine if there are limitations to funding all of the projects proposed for the Fiscal Year 2020-24 CIP. Results of the prioritization process and financial analysis are summarized in Appendix B.

Funding required for portions of several CIP projects is contingent on grants and partnership agreements that are under development and not currently secured. As the District works through the process to secure funding the project schedules may be adjusted. Projects with unsecured funding include:

- San Francisquito Creek, u/s Hwy 101
- Upper Llagas, Phase 2 (Reaches 5, 6, 7B, 8, and 14)
- Coyote Creek, Montague Expy. to Tully Road (actual cost will not be known until the planning study is completed in January 2020)

It is understood that new capital projects have an impact on future operations and maintenance, and this is included in the financial analysis. Periodically throughout the project, projections of this impact are updated to reflect changes in the project elements.

Flooding on Coyote Creek caused by severe storm in February 2017 led the District to reevaluate the schedule, level of flood protection, and funding sources for the Coyote Creek Project. A public hearing was held on June 13, 2017 to extend the Coyote Creek project to Tully Road and evaluate a project that would provide protection from a 20- to 25-year flood event. Staff worked with the Board CIP Committee to identify possible funding for construction of this project.

District staff collects high water marks from significant storm events, conducts topographic surveys and collected information on vegetation growth following the 2017 storm events. The analyses, completed in 2018 for Lower Guadalupe River, indicate that a section of the Lower Guadalupe River, from upstream of Tasman Drive to Airport Parkway, no longer has conveyance capacity for the 100-year event for which it was designed. The District is actively exploring options to restore the river to 100-year flow capacity, but there are many challenges ahead. Preliminary assessments indicate that vegetation removal as permitted under the existing SMP alone will not be enough to restore the design conveyance. The Guadalupe River, Tasman Drive to I-880 Project was,

included in the FY 2020-24 CIP to; investigate options for immediate interim measures and to conduct an alternatives analysis and environmental evaluation of additional measures, such as construction of a floodwall or levee raising to re-establish flow conveyance capacity and freeboard for a 100-year event.

The voter approved Safe, Clean Water program is providing funding for some of the highest priority flood protection projects including:

- Permanente Creek, San Francisco Bay to Foothill Expy.
- San Francisquito Creek, SF Bay to Middlefield Road
- Sunnyvale East & West Channels
- Upper Guadalupe River, I-280 to Blossom Hill Road
- Upper Penitencia Creek, Coyote to Dorel Drive
- Berryessa Creek, Calaveras Blvd. to I-680
- Coyote Creek, Montague Expy. to I-280 (Partial funding)
- Upper Llagas Creek, Buena Vista Rd. to Llagas Rd.
- San Francisco Bay Shoreline - Design and Partial Construction of EIA 11 and Planning for other EIAs
- Los Gatos Creek Restoration and Flood Protection

An implementation schedule for the Safe, Clean Water projects is available in Appendix E.

Delays in the federal funding for many of the USACE projects have extended the schedules beyond the dates committed by the District. Therefore, the District is evaluating the option of proceeding with the local funding option on several of these projects.

The following high priority flood protection projects, unfunded or partially funded, are of major concern to meet the Board's Ends Policy E–3, "There is a healthy and safe environment for residents, businesses and visitors, as well as for future generations."

Partially Funded and Unfunded CIP Projects

- Coyote Creek, Montague Expy. to Tully Road (actual cost will not be known until the planning study is completed in January 2020)
- San Francisquito Creek 100 year flood protection upstream of Highway 101
- Upper Berryessa Creek, I-680 to Old Piedmont Road (unfunded; $20 million)
- Upper Llagas, Reach 14
- Upper Penitencia Creek, Coyote Creek to Dorel Drive (USACE funding is unlikely)

Flood Protection Capital Improvements

The following table is a project funding schedule for flood protection capital improvements resulting from this year's priority process and financial analysis. Detailed information for each project can be found in this document on the following pages in the order presented in this table. The chart also identifies partially funded projects and estimated unspent appropriation from FY 2018-19.

Flood Protection Capital Improvements ($K)

Project Number	PROJECT NAME	Through FY18	FY19	FY19 Unspent	FY20	FY21	FY22	FY23	FY24	FY25-34	TOTAL
	LOWER PENINSULA WATERSHED										
10394001	Palo Alto Flood Basin Tide Gate Structure Improvements	1,158	1,992	-	1,918	7,048	114	-	-	-	12,230
10244001s	Permanente Creek, SF Bay to Foothill Expressway	91,197	7,690	178	2,609	237	23	-	-	-	101,756
10284007s	San Francisquito Creek, SF Bay thru Searsville Dam (E5)	54,876	5,070	111	2,016	5,264	21,772	-	-	-	88,998
	WEST VALEY WATERSHED										
26074002	Sunnyvale East and West Channels	30,997	-	3,717	4,441	11,829	11,441	10,219	-	-	68,927
	GUADALUPE WATERSHED										
30114002	Canoas Creek, Rodent Damage Repair	7,397	-	504	-	-	-	-	-	-	7,397
30154019	Guadalupe River Tasman Dr - I-880	-	-	-	1,000	-	-	-	-	-	1,000
26154001s	Guadalupe River–Upper, I-280 to Blossom Hill Road (E8)	128,040	6,516	21,117	87	15,914	10,669	5,901	-	-	167,127
26204001	Los Gatos Creek Restoration & Flood Protection Project	-	-	-	226	382	285	9,200	-	-	10,093
	COYOTE WATERSHED										
26174041s	Berryessa Creek, Calaveras Boulevard to Interstate 680	54,343	209	7,128	1	-	-	-	-	-	54,553
40174004s	Berryessa Ck, Lower Penitencia Ck to Calaveras Blvd	108,593	17,473	6,282	-	679	399	-	-	73,203	200,347
26174043	Coyote Creek, Montague Expressway to Tully Road (E3)	12,248	2,259	-	941	1,065	7,110	9,898	7,163	423	41,107
40264011	Cunningham Flood Detention Certification	9,961	1,290	52	235	33	-	-	-	-	11,519
40334005	Lower Penitencia Ck Improvements, Berryessa to Coyote Cks.	14,416	1,881	1,640	8,989	601	628	322	-	-	26,837
40264007s	Lower Silver Creek, I-680 to Cunningham (Reach 4-6)	101,042	507	921	739	174	57	60	-	-	102,579
40324003s	Upper Penitencia Creek, Coyote Creek to Dorel Drive	16,702	2,019	4,990	1,305	-	-	239	2,257	38,304	60,826
	UVAS LLAGAS WATERSHED										
50284010	Llagas Creek–Lower, Capacity Restoration, Buena Vista Road to Pajaro River	7,046	-	2,208	-	-	587	3,265	2,999	-	13,897
26174051s	Llagas Creek–Upper, Buena Vista Avenue to Llagas Road	108,090	5,498	16,103	11,984	33,630	33,753	23,581	3,012	3,706	223,254
	MULTIPLE WATERSHEDS										
00044026s	San Francisco Bay Shoreline (E7)	29,188	6,722	6,530	4,759	18,386	5,586	18,671	10,564	1,195	95,071
62084001	Watersheds Asset Rehabilitation Program	14,562	9,893	-	11,375	11,787	8,950	9,254	9,568	106,186	181,575
	TOTAL	789,856	69,019	71,481	52,625	107,029	101,374	90,610	35,563	223,017	1,469,093

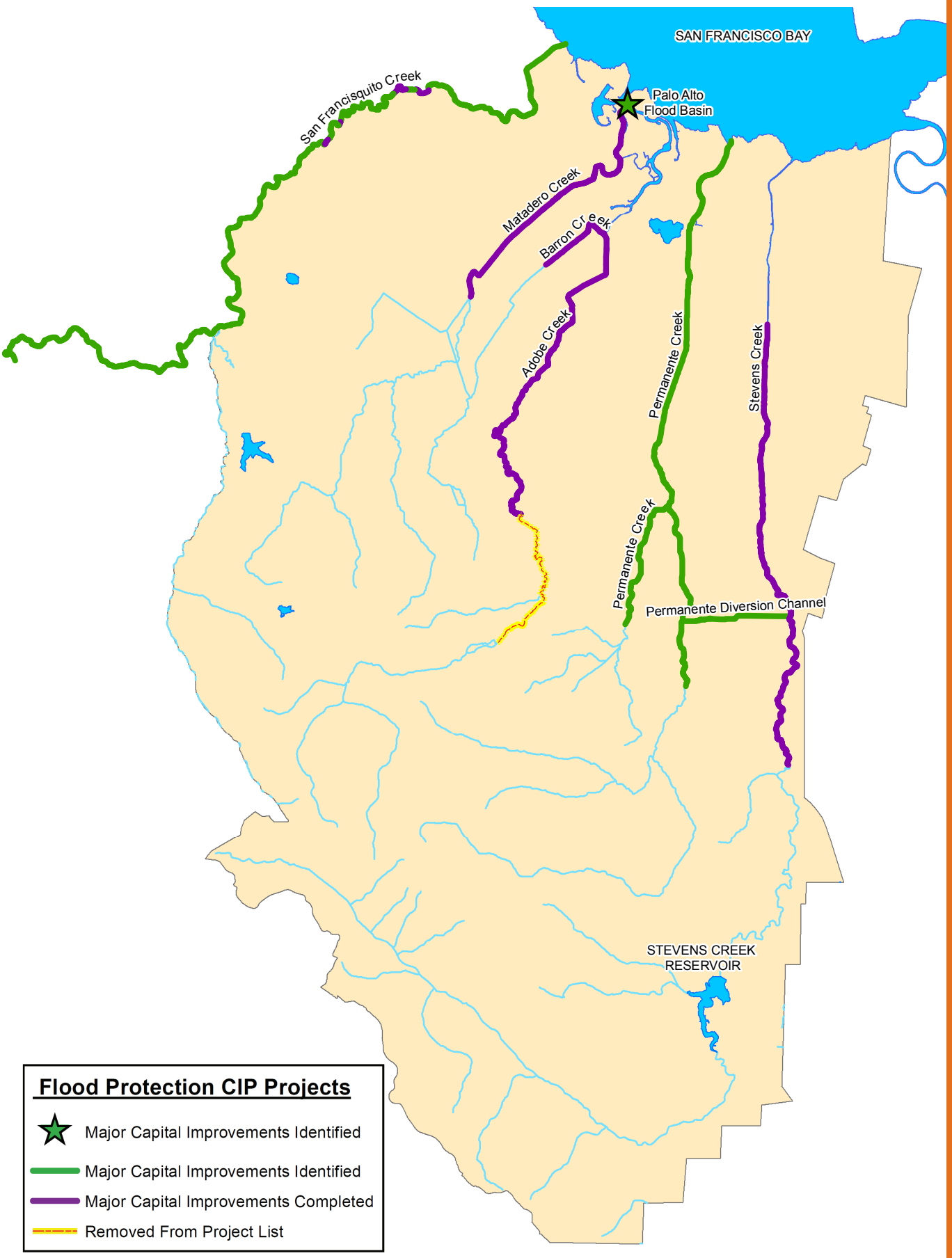
The following table shows funding requirements from each funding source for flood protection capital improvements.

Flood Protection - Funding Sources ($K)

Fund Number	FUND NAME	Through FY18	FY19	FY19 Unspent	FY20	FY21	FY22	FY23	FY24	FY25-34	TOTAL
12	Watershed Stream Stewardship Fund	361,057	43,021	10,673	28,529	40,046	23,055	38,146	29,178	145,313	708,345
26	Safe, Clean Water and Natural Flood Protection Fund	428,799	25,998	60,808	24,096	66,983	78,319	52,464	6,385	77,704	760,748
	TOTAL	789,856	69,019	71,481	52,625	107,029	101,374	90,610	35,563	223,017	1,469,093

FY 2018-19 Funds to be reappropriated

Lower Peninsula Watershed



Project	**Palo Alto Flood Basin Tide Gate Structure Improvements**
Program	Flood Protection - Lower Peninsula Watershed
Priority No.	56
Project No.	10394001
District Contact	Ngoc Nguyen nnguyen@valleywater.org

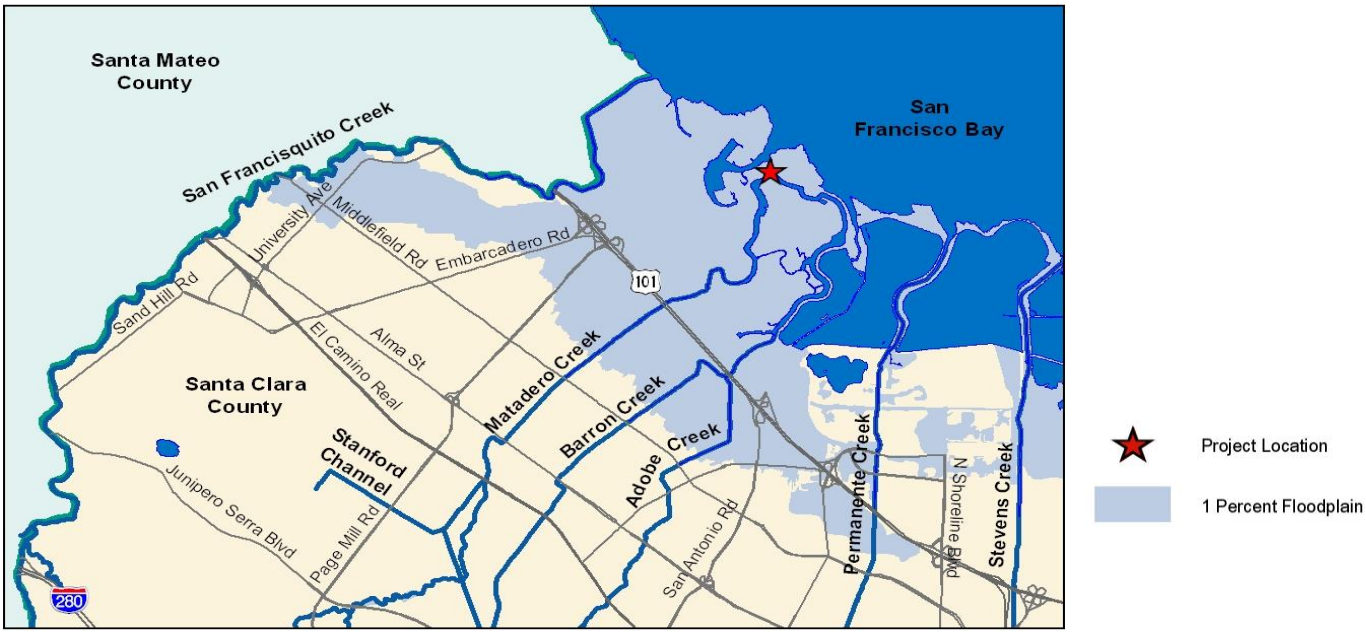
View from the west side of the Palo Alto tide gates facing east

PROJECT DESCRIPTION

This project plans, designs, and constructs improvements to the Palo Alto Flood Basin structure to accomplish the following objectives:

- Mitigate potential failure of the existing tide gates structure.
- Reduce the possibility of flooding in lower reaches of Matadero, Adobe, and Barron Creeks.
- Adapt to future sea level rise scenarios.
- Coordinate with the SAFER Bay, South Bay Shoreline, and Mountain View Ponds projects.
- Protect habitat in the Palo Alto Flood Basin and around the work area.

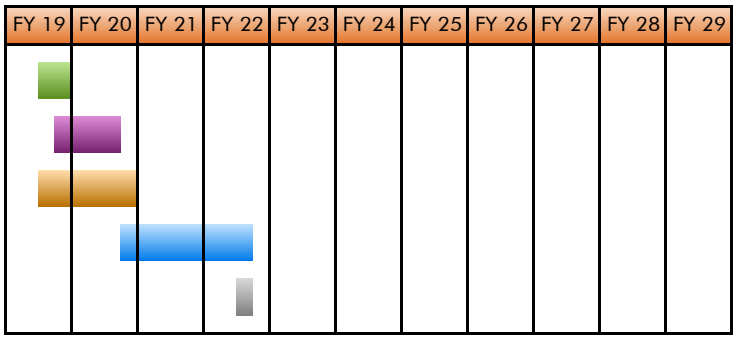
PROJECT LOCATION



SCHEDULE & STATUS

November 2018 to January 2022

Phase	Cost
Plan	1,349
Permits	124
Design	1,801
Construct	8,694
Closeout	-
	11,968



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY18	FY19	FY20	FY21	FY22	FY23	FY24	Future	
10394001-Palo Alto Flood Basin Tide Gate Structure Improvements	910	2,240	1,918	6,800	100	0	0	0	11,968
with inflation	910	2,240	1,918	7,048	114	0	0	0	12,230

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY18	FY19		FY20	FY21	FY22	FY23	FY24	Future	
10394001-Palo Alto Flood Basin Tide Gate Structure Improvements	1,158	1,992	0	1,918	7,048	114	0	0	0	12,230

Adjusted Budget includes adopted budget plus a planned budget adjustment of $676,000.

FUNDING SOURCES

(in thousands $)

SCVWD Watershed and Stream Stewardship Fund	12,230
Other Funding Sources	0
Total	**12,230**

OPERATING COST IMPACTS

Operating cost impacts are anticipated and will be determined during the design phase.

USEFUL LIFE: 50 Years

Project	**Permanente Creek, San Francisco Bay to Foothill Expressway**
Program	Flood Protection – Lower Peninsula Watershed
Priority No.	62
Project No.	10244001s
District Contact	Ngoc Nguyen nnguyen@valleywater.org

Permanente Creek, looking downstream at the golf course foot bridge

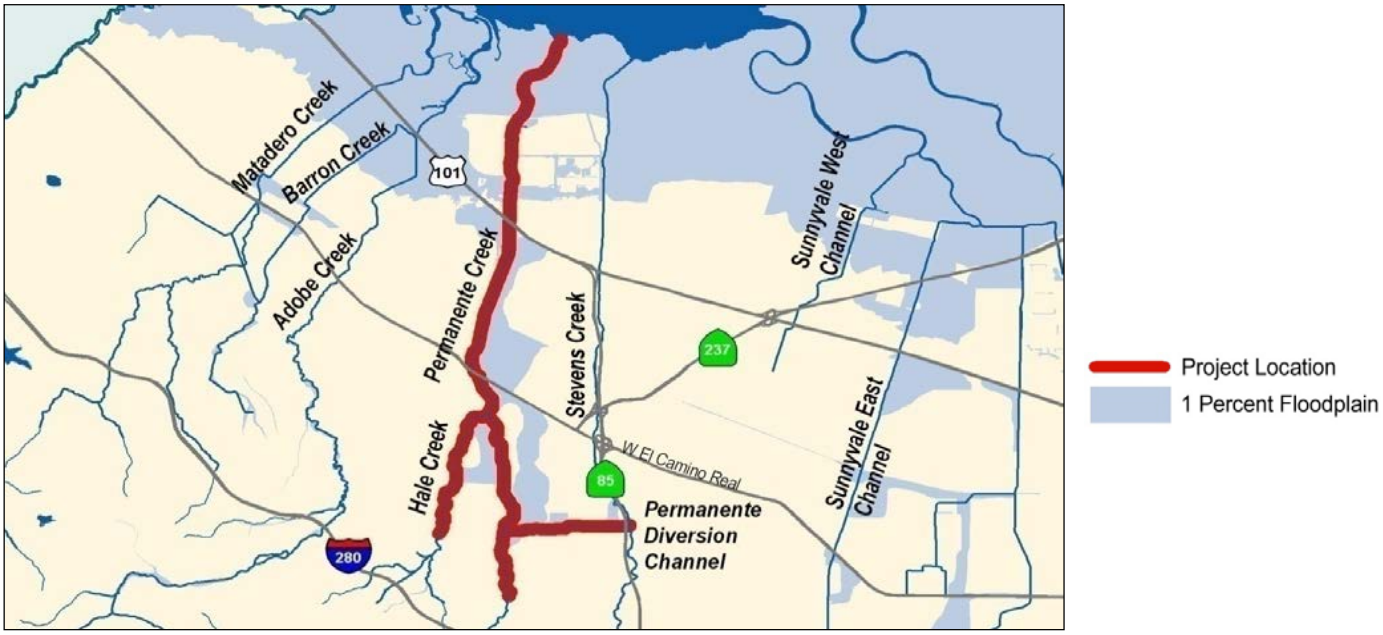
PROJECT DESCRIPTION

This project plans, designs, and constructs improvements along 10.6 miles of Permanente Creek, from San Francisco Bay to Foothill Expressway, Hale Creek from Foothill Expressway to its confluence with Permanente Creek, and the diversion structure between Permanente and Stevens Creeks, to accomplish the following objectives:

- Provide flood protection to 1,664 parcels, including Middlefield Road and Central Expressway.
- Reduce erosion and sedimentation, reduce maintenance costs, and improve safety and stability of the failing channel on Permanente Creek from the San Francisco Bay to Foothill Expressway.
- Provide environmental restoration and enhancement benefits, where opportunities exist.
- Provide recreation enhancements, where opportunities exist.
- Provide natural flood protection by taking a multiple-objective approach.

This project meets the commitments of the voter approved Safe, Clean Water Program. For a full description of the SCW benefits and KPI's, please visit www.valleywater.org.

PROJECT LOCATION

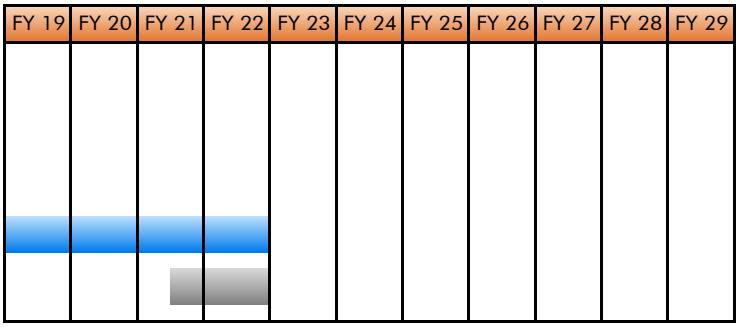


SCHEDULE & STATUS

July 2001 to June 2022

Construction includes multiple contract phases and three years of plant establishment monitoring.

Phase	Cost
Plan	10,049
Permits	3,770
Design	16,730
Construct	46,827
Closeout	50
	101,559



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY18	FY19	FY20	FY21	FY22	FY23	FY24	Future	
10244001-Permanente Ck, Bay to Foothill Expwy – Lower Peninsula Fund	17,363	0	0	0	0	0	0	0	17,363
with inflation	17,363	0	0	0	0	0	0	0	17,363
26244001-Permanente Ck, Bay to Foothill Expwy – Clean, Safe Creeks Fund	74,099	7,247	2,609	217	20	0	0	0	84,192
with inflation	74,099	7,247	2,609	237	23	0	0	0	84,215
TOTAL	91,462	7,247	2,609	217	20	0	0	0	101,555
with inflation	91,462	7,247	2,609	237	23	0	0	0	101,578

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY18	FY19		FY20	FY21	FY22	FY23	FY24	Future	
10244001-Permanente Ck, Bay to Foothill Expwy – Lower Peninsula Fund	17,541	0	178	0	0	0	0	0	0	17,541
26244001-Permanente Ck, Bay to Foothill Expwy – Clean, Safe Creeks Fund	73,656	7,690	0	2,609	237	23	0	0	0	84,215
TOTAL	91,197	7,690	178	2,609	237	23	0	0	0	101,756

Adjusted Budget includes adopted budget plus approved budget adjustments. Allocated funding exceeds total planned expenditures by approximately $178,000. Excess funds will be returned to Fund Reserves at the close of the project.

FUNDING SOURCES

(in thousands $)

SCVWD Watershed Stream Stewardship Fund	17,541
SCVWD Clean, Safe Creeks and Natural Flood Protection Fund	83,192
City of Mountain View	1,023
Total	101,756

OPERATING COST IMPACTS

The completion of this project is anticipated to increase operating costs by approximately $100,000 per year, beginning in FY 2020. Increases in operations and maintenance costs include sediment removal at three flood detention sites, and bypass channel inlet and outlet operations and maintenance.

USEFUL LIFE: 30+ Years

Project	**San Francisquito Creek, San Francisco Bay through Searsville Dam**
Program	Flood Protection – Lower Peninsula Watershed
Priority No.	78
Project No.	10284007s
District Contact	Ngoc Nguyen nnguyen@valleywater.org

Upstream face of Pope/Chaucer Street with water surface approximately two feet below the soffit

PROJECT DESCRIPTION

This project provides coordination and support to the San Francisquito Joint Powers Authority, in partnership with the U.S. Army Corps of Engineers, to complete planning and design documents for an approved project alternative on San Francisquito Creek, from San Francisco Bay through Searsville Dam. This project will accomplish the following objectives:

- Provide flood protection.
- Reduce bank erosion and sedimentation-related impacts along San Francisquito Creek.
- Avoid potential adverse impacts on fish and wildlife habitats.
- Minimize impacts to the creek's environmental resources and restore the riparian corridor where feasible.

The San Francisquito construction project will provide 100-year flood protection from San Francisco Bay to Highway 101 and replace two bridges between Highway 101 and Middlefield Road.
This project is accounted for in the following job numbers: (10284007 & 10284008 are Completed)

- 26284001 – SF Bay through Searsville Dam
- 26284002 – Construction - San Francisco Bay to Middlefield Rd.

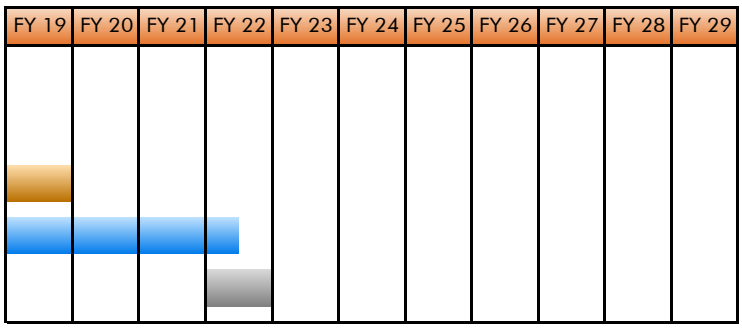
This project meets the commitments of the voter approved Safe, Clean Water Program, Project E5. For a full description of the SCW benefits and KPI's, please visit www.valleywater.org.

PROJECT LOCATION

SCHEDULE & STATUS

June 2003 to June 2020

Phase	Cost
Plan	4,261
Permits	1,566
Design	13,413
Construct	53,879
Closeout	150
	86,671



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY18	FY19	FY20	FY21	FY22	FY23	FY24	Future	
10284007-San Francisquito Ck, Bay-Searsville Dam	4,064	0	0	0	0	0	0	0	4,064
with inflation	4,064	0	0	0	0	0	0	0	4,064
10284008-San Francisquito Ck, Early Implementation	1,614	0	0	0	0	0	0	0	1,614
with inflation	1,614	0	0	0	0	0	0	0	1,614
26284001-San Francisquito Ck, Bay-Searsville Dam	6,671	0	111	0	0	0	0	0	6,782
with inflation	6,671	0	111	0	0	0	0	0	6,782
26284002-San Francisquito Ck - Construction - SF Bay to Middlefield Rd.	41,236	6,250	2,016	4,926	19,783	0	0	0	74,211
with inflation	41,236	6,250	2,016	5,264	21,772	0	0	0	76,539
TOTAL	**53,585**	**6,250**	**2,127**	**4,926**	**19,783**	**0**	**0**	**0**	**86,671**
with inflation	**53,585**	**6,250**	**2,127**	**5,264**	**21,772**	**0**	**0**	**0**	**88,999**

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY18	FY19		FY20	FY21	FY22	FY23	FY24	Future	
10284007-San Francisquito Ck, Bay-Searsville Dam	4,064	0	0	0	0	0	0	0	0	4,064
10284008-San Francisquito Ck, Early Implementation	1,614	0	0	0	0	0	0	0	0	1,614
26284001-San Francisquito Ck, Bay-Searsville Dam	6,782	0	111	0	0	0	0	0	0	6,782
26284002-San Francisquito Ck - Construction - SF Bay to Middlefield Rd.	42,416	5,070	0	2,016	5,264	21,772	0	0	0	76,539
TOTAL	**54,876**	**5,070**	**111**	**2,016**	**5,264**	**21,772**	**0**	**0**	**0**	**88,999**

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Watershed Stream Stewardship Fund	5,678
SCVWD Safe, Clean Water and Natural Flood Protection Fund	58,058
JPA and Member Agencies (D/S Funding)	5,480
Unsecured Grants and Partnerships (U/S Funding)	19,783
Total	**88,999**
San Francisquito Joint Powers Authority	11,040
U.S. Army Corps of Engineers - In-kind Services	3,000
County of San Mateo - In-kind Services	1,500
City of Palo Alto (Newell Road Bridge)	7,100

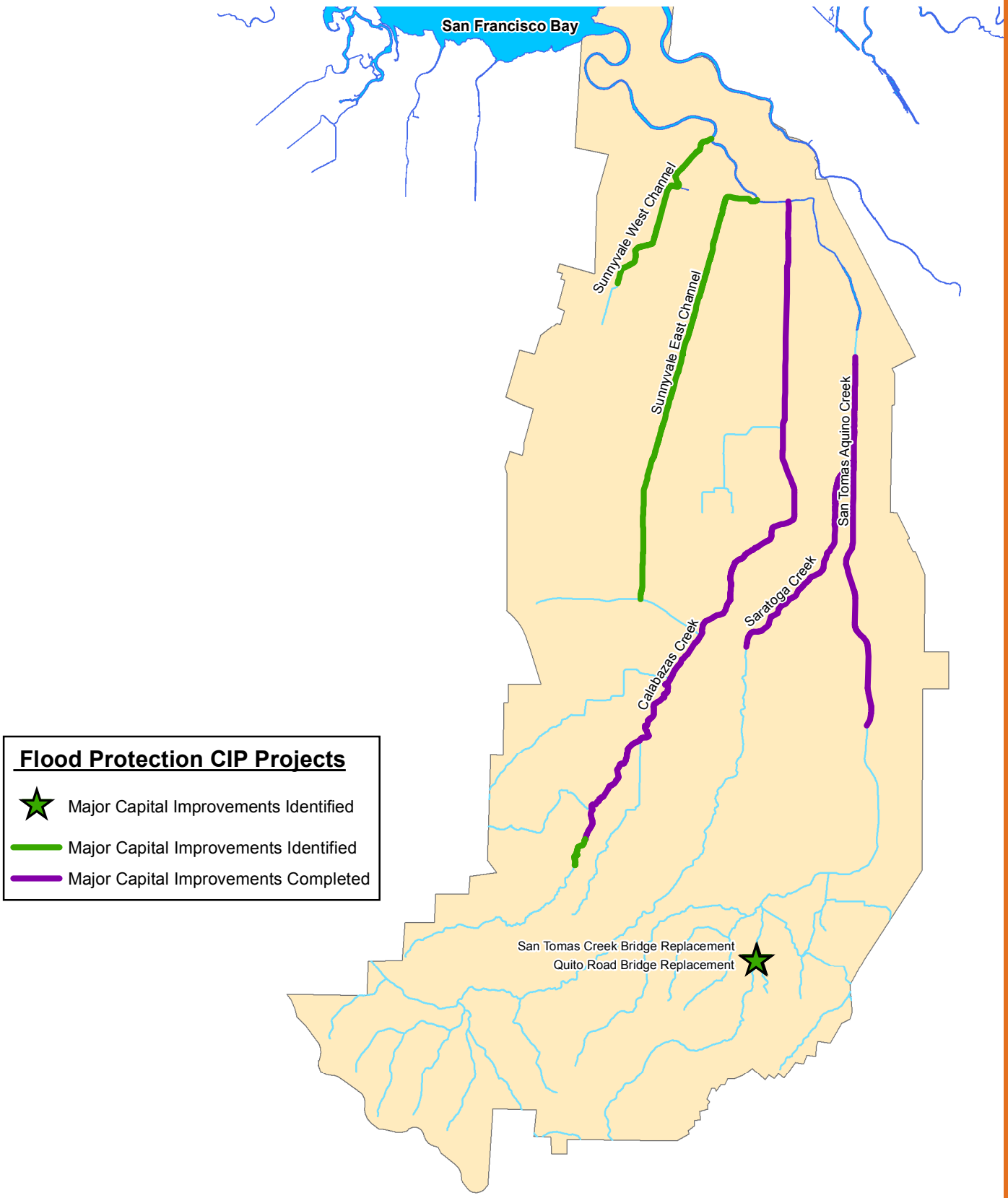
County and Corps participation are for Feasibility Study activities only.
Additional funding will be negotiated during subsequent phases.

OPERATING COST IMPACTS

No operating budget impacts are expected from the construction of this project.

USEFUL LIFE: Not Available

West Valley Watershed



Project	**Sunnyvale East and West Channels Flood Protection Project**
Program	Flood Protection – West Valley Watershed
Priority No.	65
Project No.	26074002
District Contact	Christopher Hakes CHakes@valleywater.org

Sunnyvale West Channel looking upstream from Java Drive

PROJECT DESCRIPTION

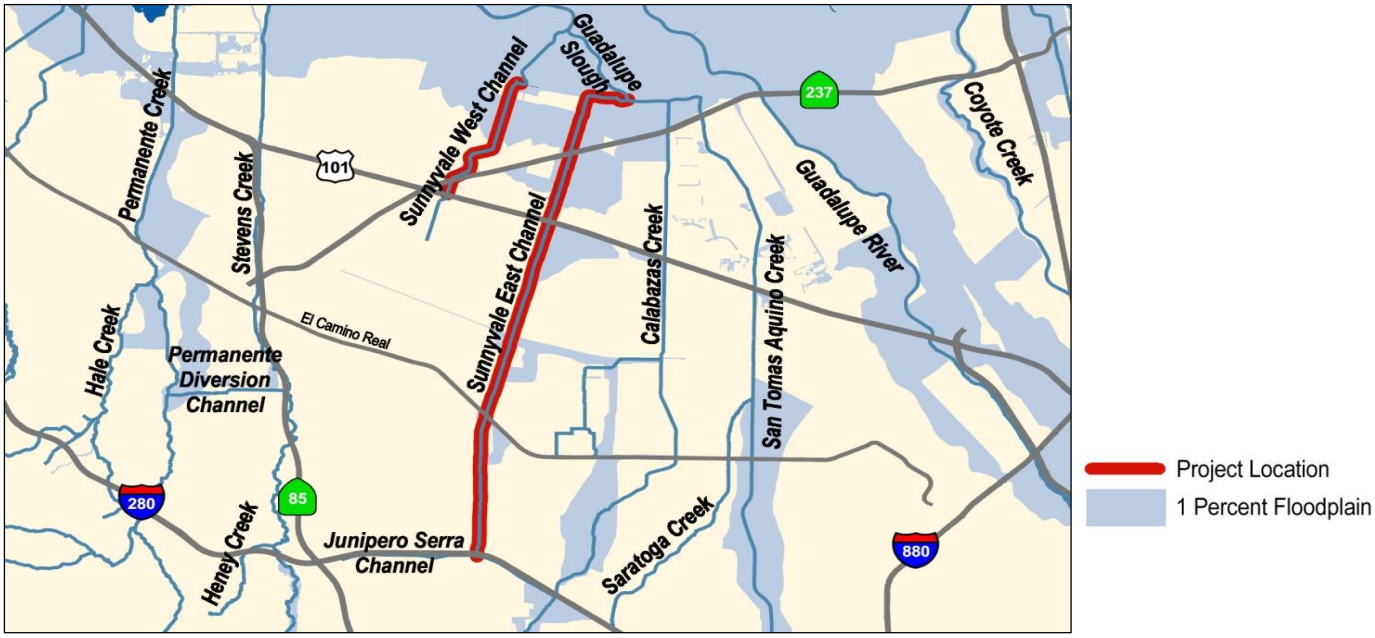
This project plans, designs, and constructs improvements to approximately 6.4 miles of the Sunnyvale East Channel, from Guadalupe Slough to Interstate 280, and 2.3 miles of the Sunnyvale West Channel, from Guadalupe Slough to Highway 101, to accomplish the following objectives:

- Provide flood protection to over 1,600 parcels along Sunnyvale East and West Channels.
- Provide environmental enhancement benefits where opportunities exist.
- Provide recreation enhancements where opportunities exist.
- Reduce erosion, sedimentation, and maintenance costs.
- Protect fish and wildlife habitat.

The Sunnyvale East and Sunnyvale West Channels were originally identified as separate projects. In order to improve efficiency by combining efforts, the planning, design and construction phases for both projects will be performed as a single effort.

This project meets the commitments of the voter approved Safe, Clean Water Program. For a full description of the SCW benefits and KPI's, please visit www.valleywater.org.

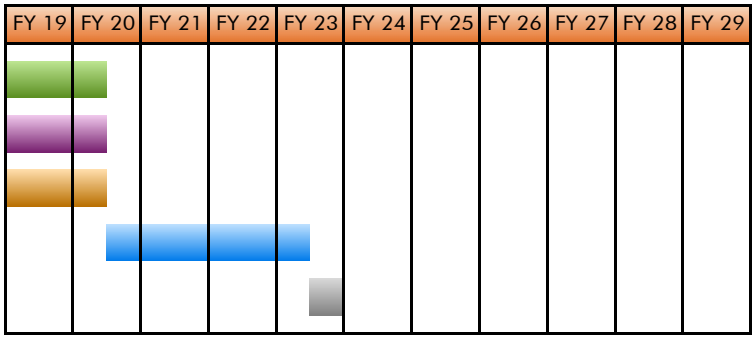
PROJECT LOCATION



SCHEDULE & STATUS

January 2006 to December 2023

Phase	Cost
Plan	5,768
Permits	1,117
Design	9,456
Construct	49,818
Closeout	200
	67,538



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY18	FY19	FY20	FY21	FY22	FY23	FY24	Future	
26074002-Sunnyvale East and West Channels Flood Protection Project	17,289	9,991	8,158	11,400	11,000	9,700	0	0	67,538
with inflation	17,289	9,991	8,158	11,829	11,441	10,219	0	0	68,928

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY18	FY19		FY20	FY21	FY22	FY23	FY24	Future	
26074002-Sunnyvale East and West Channels Flood Protection Project	30,997	0	3,717	4,441	11,829	11,441	10,219	0	0	68,928

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

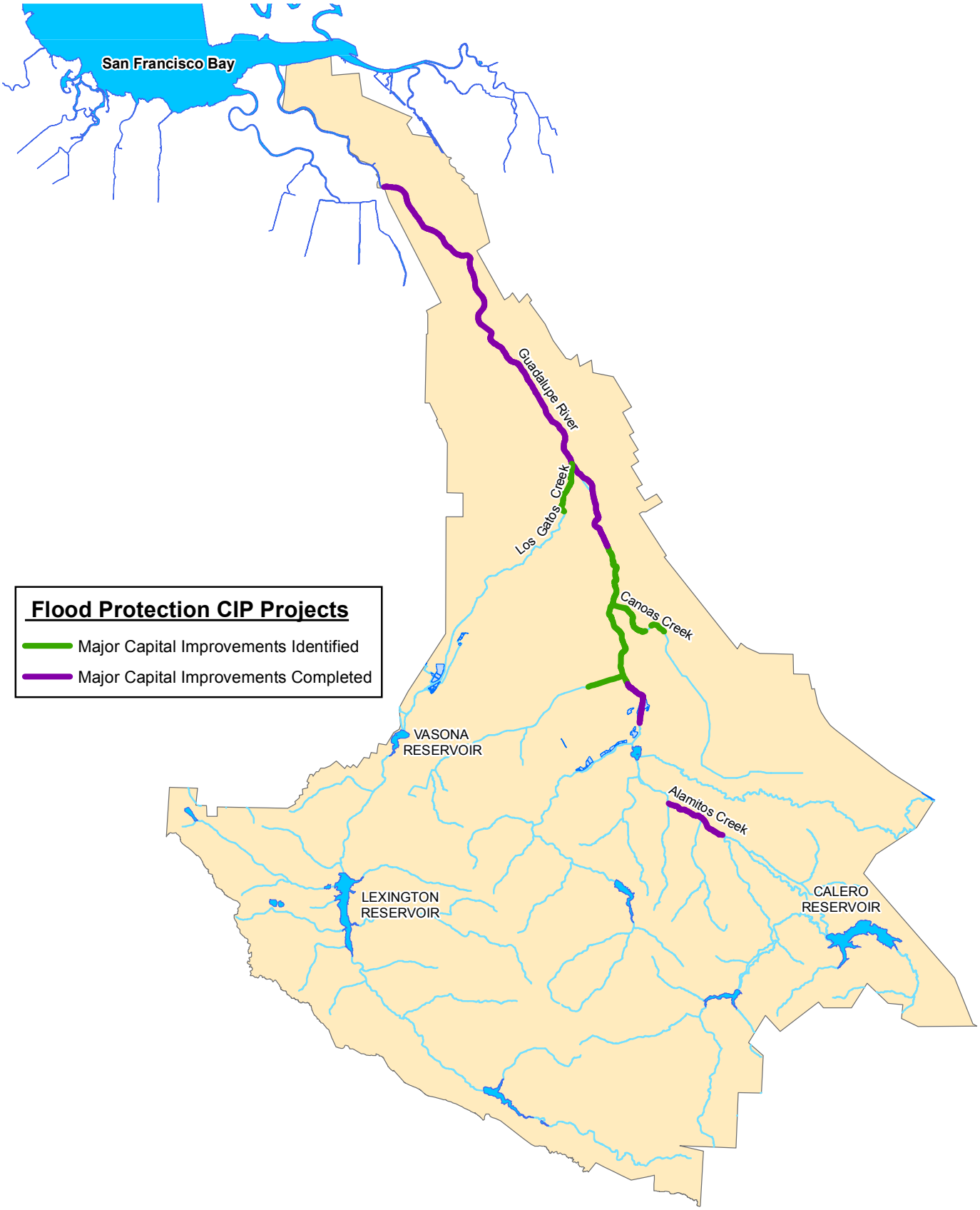
SCVWD Clean, Safe Creeks and Natural Flood Protection Fund	68,928
Other Funding Source	0
Total	68,928

OPERATING COST IMPACTS

The completion of this project is anticipated to increase operating costs by approximately $50,000 per year, beginning in FY 2023. Increases in operations and maintenance costs include graffiti removal in areas where the City of Sunnyvale's JUA are not applicable, mowing and weed control under the levees.

USEFUL LIFE: 30+ Years

Guadalupe Watershed



Project	**Canoas Creek Rodent Damage Repair**
Program	Flood Protection - Guadalupe Watershed
Priority No.	60
Project No.	30114002
District Contact	Ngoc Nguyen nnguyen@valleywater.org

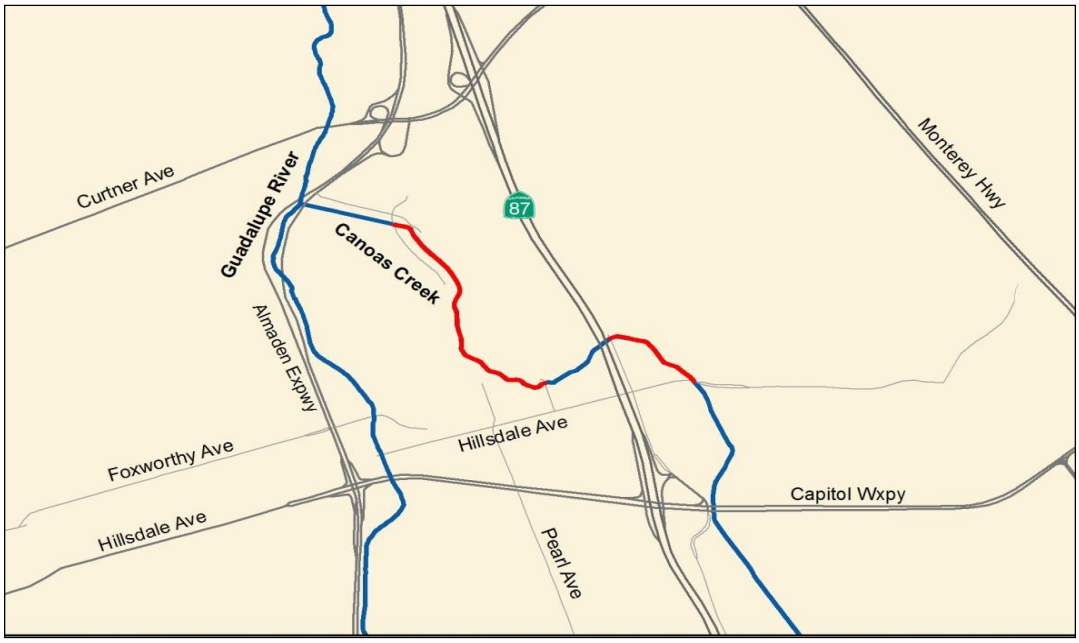
View of damage caused by burrowing animals along Canoas Creek in the Guadalupe Watershed

PROJECT DESCRIPTION

This project plans, designs, and constructs repairs to Canoas Creek to accomplish the following objectives:

- Repair approximately one mile of damaged creek's levee and embankment.
- Reduce frequent maintenance costs associated with routine bank erosion repair projects.
- Reduce the risk of levee/bank slope failure due to damage caused from burrowing animals.

PROJECT LOCATION

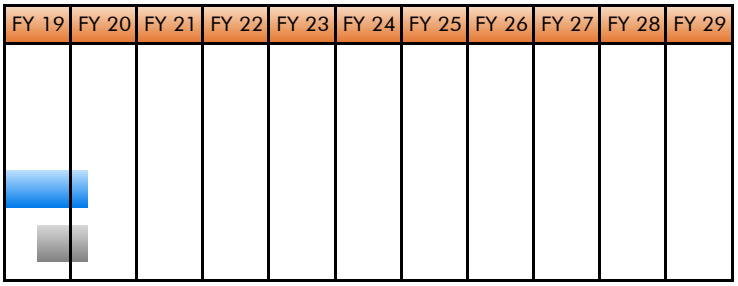


Project Location

SCHEDULE & STATUS

March 2015 to June 2020

Phase	Cost
Plan	33
Design	584
Construct	6,291
Closeout	5
	6,930



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY18	FY19	FY20	FY21	FY22	FY23	FY24	Future	
30114002-Canoas Creek Rodent Damage Repair	6,838	55	37	0	0	0	0	0	6,930
with inflation	6,838	55	37	0	0	0	0	0	6,930

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY18	FY19		FY20	FY21	FY22	FY23	FY24	Future	
30114002-Canoas Creek Rodent Damage Repair	7,307	0	414	0	0	0	0	0	0	7,307

Adjusted Budget includes adopted budget plus approved planned budget adjustments. Funding exceeds planned expenditures by approximately $467,000. Excess funding will be returned to reserves upon completion of the project.

FUNDING SOURCES

(in thousands $)

Watershed Stream Stewardship	7,307
Other Funding Sources	0
Total	7,307

OPERATING COST IMPACTS

Operating cost impacts will be determined at the end of the construction phase.

USEFUL LIFE: 30+ Years

Project	**Guadalupe River–Upper, Interstate 280 to Blossom Hill Road**
Program	Flood Protection – Guadalupe Watershed
Priority No.	68
Project No.	26154001s
District Contact	Ngoc Nguyen nnguyen@valleywater.org

Flooding from Guadalupe River on Willow Street near the Southern Pacific Railroad Bridge

PROJECT DESCRIPTION

This project partners with the U.S. Army Corps of Engineers (Corps) to plan, design, and construct improvements along approximately 6 miles of the Guadalupe River, from Interstate 280 to Blossom Hill Road, to accomplish the following objectives:

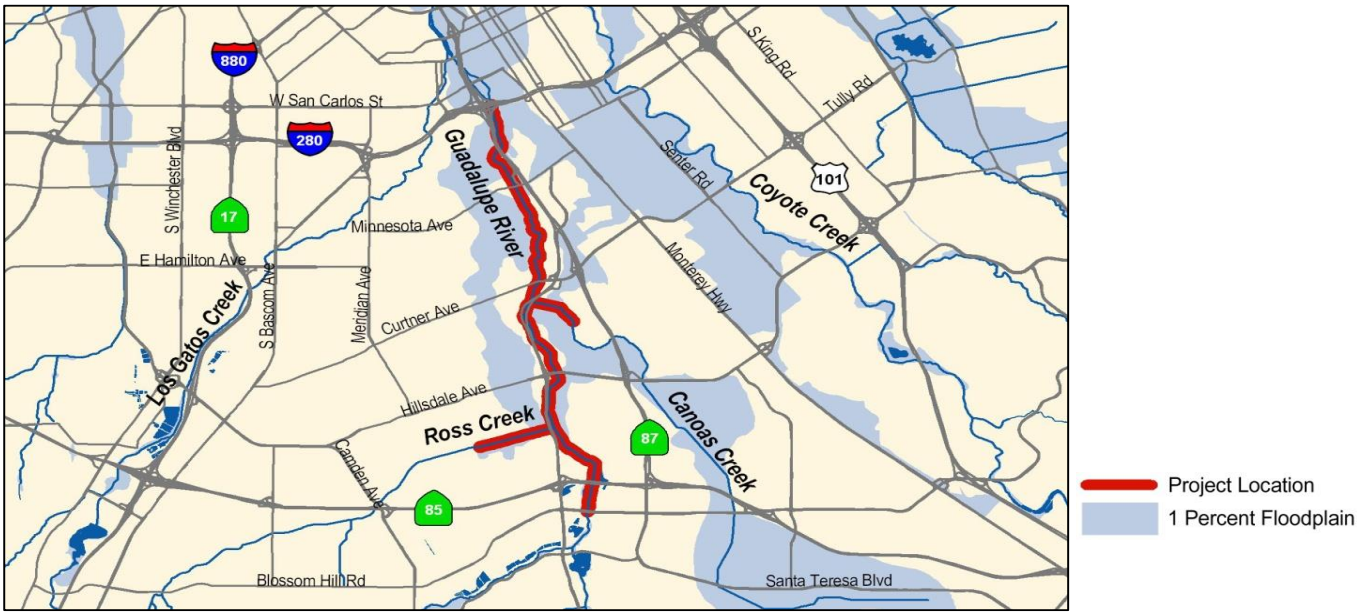
- Provide one-percent flood protection to nearly 7,000 parcels along the Guadalupe River, from I-280 to Blossom Hill Road, including portions of Ross Creek and Canoas Creek.
- Provide long-term net gains of 15 acres in riparian forest acreage, quality, and continuity of wildlife habitat, and conditions favoring Chinook salmon and steelhead trout.
- Provide access to an additional 19 miles of suitable upstream spawning and rearing habitat, which would result in significant long-term beneficial impacts on fisheries resources.
- Coordinate with the City of San Jose and the community to establish a continuous maintenance road suitable for trail development between Interstate 280 and Los Alamitos Creek.
- Improve water quality by reducing bank erosion and sedimentation-related impacts along the river and tributaries.
- Address and resolve permit coordination activities and watershed integration issues through the Guadalupe Watershed Integration Working Group.

This project is accounted for in the following job numbers:

- 26154001 Fish Passage Modification (Completed)
- 26154002 I-280 to Southern Pacific Railroad Bridge (Reach 6)
- 26154003 Southern Pacific Railroad Bridge to Blossom Hill Road (Reaches 7-12)

This project meets the commitments of the voter approved Safe, Clean Water Program, Project E8. For a full description of the SCW benefits and KPI's, please visit www.valleywater.org.

PROJECT LOCATION

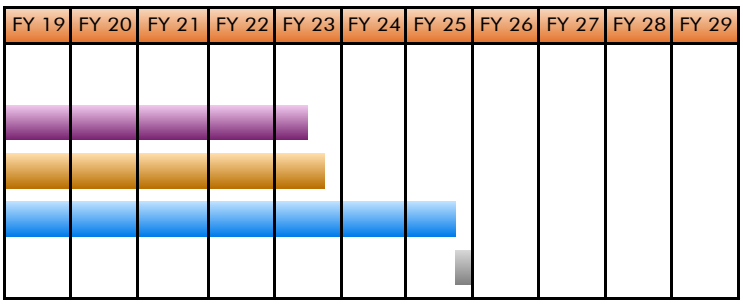


SCHEDULE & STATUS

September 1985 to June 2025

Planning phase is complete. Design and construction of eight individual reaches are being done sequentially.

Phase	Cost
Plan	9,042
Permits	2,628
Design	86,424
Construct	61,312
Closeout	165
	163,571



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**Future**	
26154001-Guadalupe Rv—Upr, Fish Passage Mods	2,651	0	0	0	0	0	0	0	2,651
with inflation	2,651	0	0	0	0	0	0	0	2,651
26154002-Guadalupe Rv—Upr, I-280 to SPRR (R6)	32,544	912	1,250	450	2,390	30	0	0	37,576
with inflation	32,544	912	1,250	491	2,638	36	0	0	37,871
26154003-Guadalupe Rv—Upper, SPRR to Blossom Hill Rd. (R7-12)	63,690	5,755	2,492	30,555	7,495	5,470	0	0	115,457
with inflation	63,690	5,755	2,492	32,884	8,031	5,865	0	0	118,718
Actuals in closed project numbers	7,887	0	0	0	0	0	0	0	7,887
with inflation	7,887	0	0	0	0	0	0	0	7,887
TOTAL	**106,772**	**6,667**	**3,742**	**31,005**	**9,885**	**5,500**	**0**	**0**	**163,571**
with inflation	**106,772**	**6,667**	**3,742**	**33,376**	**10,669**	**5,901**	**0**	**0**	**167,127**

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	**FY18**	**FY19**		**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**Future**	
26154001-Guadalupe Rv—Upr, Fish Passage Mods	2,651	0	0	0	0	0	0	0	0	2,651
26154002-Guadalupe Rv—Upr, I-280 to SPRR (R6)	34,619	0	1,163	87	491	2,638	36	0	0	37,871
26154003-Guadalupe Rv—Upper, SPRR to Blossom Hill Rd. (R7-12)	82,883	6,516	19,954	0	15,422	8,031	5,865	0	0	118,718
Actuals in closed project numbers	7,887	0	0	0	0	0	0	0	0	7,887
TOTAL	**128,040**	**6,516**	**21,117**	**87**	**15,914**	**10,669**	**5,901**	**0**	**0**	**167,127**

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Watershed Stream Stewardship Fund	12,000
SCVWD Safe, Clean Water and Natural Flood	114,062
State of California	36,474
City of San Jose	4,591
Total	**167,127**
U.S. Army Corps of Engineers - In-kind Services	188,000

OPERATING COST IMPACTS

The completion of this project is anticipated to increase operating costs by approximately $480,000 per year, beginning in FY 2025, for mitigation and monitoring labor and equipment, implementation of adaptive management measures, and operations and maintenance in accordance with the Corps Operations and Maintenance Manual.

USEFUL LIFE: 30+ Years

Project	**Guadalupe River Tasman Dr - I-880**
Program	Flood Protection - Guadalupe Watershed
Priority No.	48
Project No.	30154019
District Contact	Vincent Gin vgin@valleywater.org

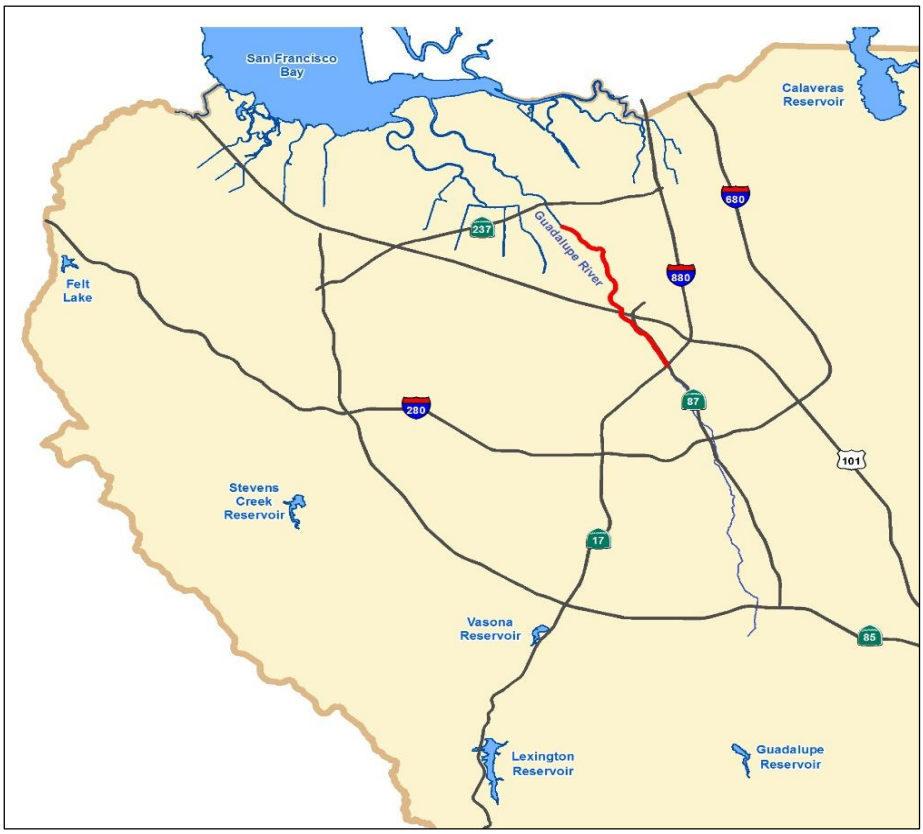
East bank of the Guadalupe River, looking upstream toward Trimble Road.

PROJECT DESCRIPTION

This project plans and evaluates the options to restore the 100-year flood conveyance capacity from Tasman Drive to Interstate 880 on the Guadalupe River, to accomplish the following objective,

- Develop a plan to restore the lower Guadalupe River to 100-year flow capacity.

PROJECT LOCATION



Project Location

SCHEDULE & STATUS

July 2014 to June 2031

Phase	Cost
Plan	1,000
Design	-
Construct	-
Closeout	-
	1,000

FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures						Total
Project	FY18	FY19	FY20	FY21	FY22	FY23	FY24	Future	
30154019-Guadalupe River Tasman Dr - I-880	0	0	1,000	0	0	0	0	0	1,000
with inflation	0	0	1,000	0	0	0	0	0	1,000

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY18	FY19		FY20	FY21	FY22	FY23	FY24	Future	
30154019-Guadalupe River Tasman Dr - I-880			0	1,000	0	0	0	0	0	1,000

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Watershed Stream Stewardship Fund	1,000
Other Funding Sources	0
Total	1,000

OPERATING COST IMPACTS

N/A

USEFUL LIFE: N/A

Project	**Los Gatos Creek Restoration & Flood Protection Project**
Program	Flood Protection - Guadalupe Watershed
Priority No.	59
Project No.	26204001
District Contact	Melanie Richardson MRichardson@valleywater.org

Los Gatos Creek adjacent to West Home Street

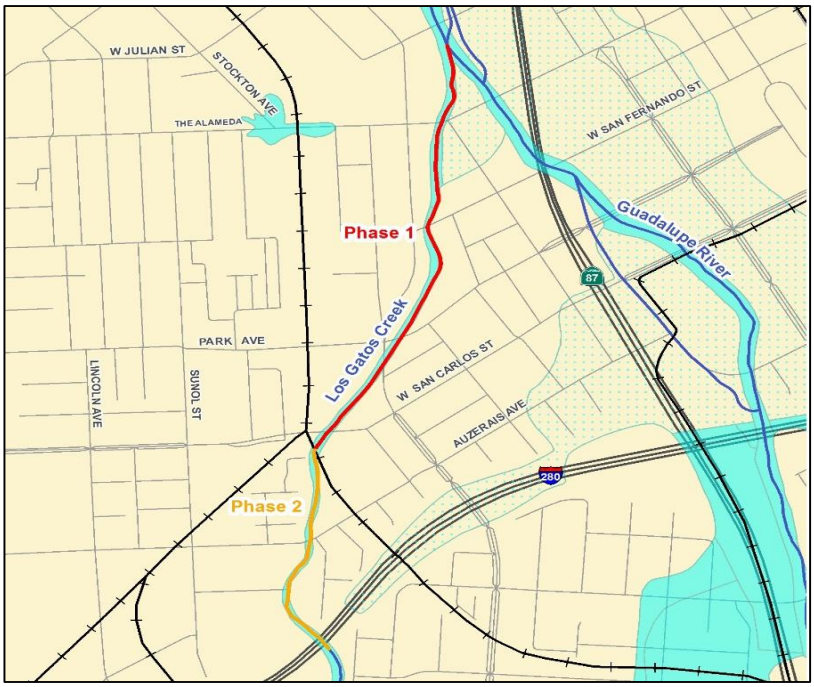
PROJECT DESCRIPTION

This project plans, designs, and constructs improvements along Los Gatos Creek and is part of a flood protection project that partners with Google and will be implemented in two phases. Phase 1 is a partnership with Google and will be implemented under the Google's lead to coincide with their development plan and schedule. Phase 1 extends approximately 3,600 feet from West Santa Clara Street to the railroad bridge crossing just upstream of West San Carlos Street. Phase 2 is a District project and will be implemented when funding is available and after Phase 1 completion. This project will accomplish the following objectives:

- Provide 100-year flood protection for approximately 500 parcels along Los Gatos Creek from Santa Clara Steet to Auzerais Avenue, while maintaining natural stream functions.
- Protect creek and other aquatic ecosystems.
- Improve quality of life in Santa Clara County through appropriate public access to trails, parks, and open space along creeks and in the watersheds.
- Using geomorphic principles, restore a stable slope and promote sediment and balance.

This project meets the commitments of the voter approved Safe, Clean Water Program. For a full description of the SCW benefits and KPI's, please visit www.valleywater.org.

PROJECT LOCATION

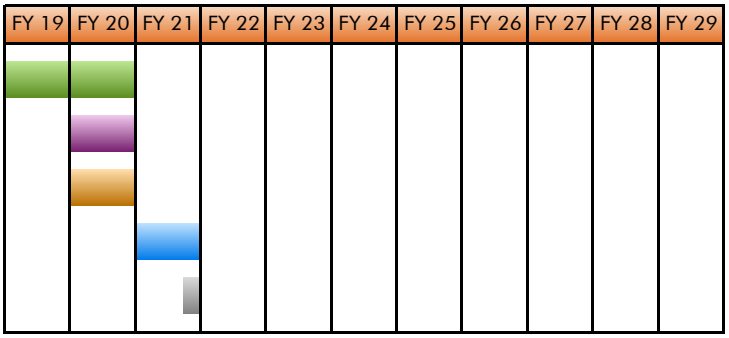


Project Location

SCHEDULE & STATUS

July 2018 to June 2021

Phase	Cost
Plan	326
Permits	-
Design	500
Construct	8,174
Closeout	-
	9,000



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY18	FY19	FY20	FY21	FY22	FY23	FY24	Future	
26204001 Los Gatos Creek Restoration & Flood Protection Project	0	0	226	350	250	8,174	0	0	9,000
with inflation	0	0	226	382	285	9,200	0	0	10,093

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY18	FY19		FY20	FY21	FY22	FY23	FY24	Future	
26204001 Los Gatos Creek Restoration & Flood Protection Project			0	226	382	285	9,200	0	0	10,093

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

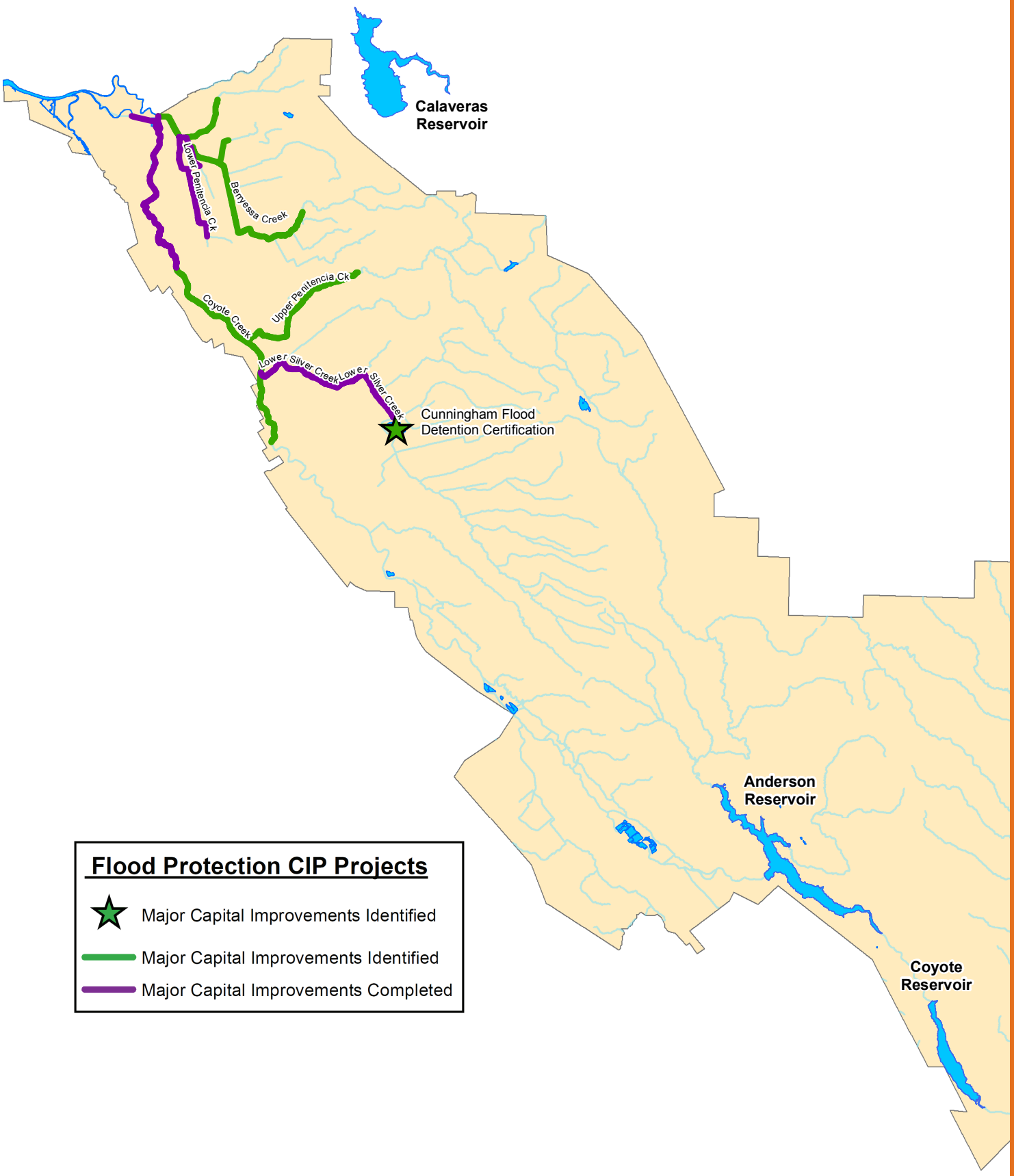
Main Funding Source	10,093
Total	**10,093**
Google - In-kind Services	12,000

OPERATING COST IMPACTS

The completion of this project is anticipated to increase operating costs by approximately $55,000 per year for the first three years. $115,000 per year, for years four and five and $66,000 per year beyond year five.

USEFUL LIFE: 50 years

Coyote Watershed



Project	**Berryessa Creek, Calaveras Boulevard to Interstate 680**
Program	Flood Protection – Coyote Watershed
Priority No.	76
Project No.	26174041s
District Contact	Ngoc Nguyen nnguyen@valleywater.org

Berryessa Creek near flood stage at Piedmont Road in San Jose

PROJECT DESCRIPTION

This project partners with the U.S. Army Corps of Engineers (Corps) to plan, design, and construct improvements along approximately 2 miles of Berryessa Creek, from Calaveras Boulevard to Interstate 680, to accomplish the following objectives:

- Provide one-percent flood protection to more than 1,100 homes, businesses, and public buildings.
- Reduce sedimentation and maintenance requirements.
- Mitigate for project impacts.
- Improve stream habitat values.
- Coordinate with the cities of San Jose and Milpitas, and the community to establish a continuous maintenance road suitable for trail development along the Berryessa Creek project.
- Obtain a Letter of Map Revision (LOMR) from the Federal Emergency Management Agency (FEMA).
- Incorporate the District's Clean, Safe Creeks and Natural Flood Protection Program Objectives.

This project is accounted for in the following job numbers:

26174041—Coordination with Corps
26174042—Reimbursable work—Lands, Easements, Rights of Way, Relocations and Disposal (LERRDs)

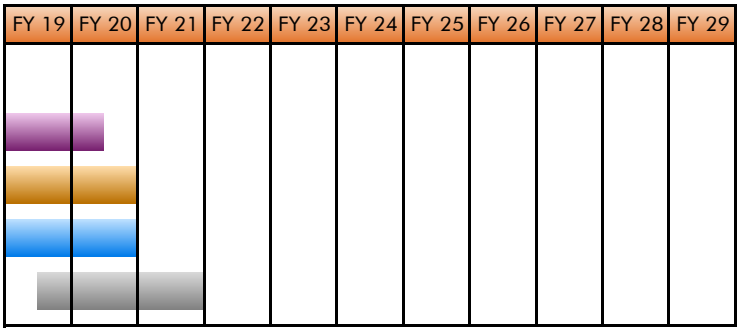
This project meets the commitments of the voter approved Safe, Clean Water Program. For a full description of the SCW benefits and KPI's, please visit www.valleywater.org.

PROJECT LOCATION

SCHEDULE & STATUS

January 2000 to June 2021

Phase	Cost
Plan	8,321
Permits	983
Design	11,399
Construct	22,712
Closeout	359
	47,944



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY18	FY19	FY20	FY21	FY22	FY23	FY24	Future	
26174041-Berryessa Creek, Corps Coordination	21,736	6,910	261	50	0	0	0	0	28,957
with inflation	21,736	6,910	261	55	0	0	0	0	28,962
26174042-Berryessa Creek, LERRDs	17,446	1,332	209	0	0	0	0	0	18,987
with inflation	17,446	1,332	209	0	0	0	0	0	18,987
TOTAL	**39,182**	**8,242**	**470**	**50**	**0**	**0**	**0**	**0**	**47,944**
with inflation	**39,182**	**8,242**	**470**	**55**	**0**	**0**	**0**	**0**	**47,949**

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY18	FY19		FY20	FY21	FY22	FY23	FY24	Future	
26174041-Berryessa Creek, Corps Coordination	35,566	0	6,920	0	0	0	0	0	0	35,566
26174042-Berryessa Creek, LERRDs	18,777	209	208	1	0	0	0	0	0	18,987
TOTAL	**54,343**	**209**	**7,128**	**1**	**0**	**0**	**0**	**0**	**0**	**54,553**

Adjusted Budget includes adopted budget plus approved budget adjustments. Allocated funding exceeds planned expenditures by approximately $6,604,000. Excess funds will be returned to Fund Reserves at the end of the project.

FUNDING SOURCES

(in thousands $)

SCVWD Clean, Safe Creeks and Natural Flood Protection Fund	18,953
State of California	25,600
Department of Water Resources (Prop 1E)	10,000
Total	**54,553**
U.S. Army Corps of Engineers - In-kind Services	13,600

OPERATING COST IMPACTS

The completion of this project is anticipated to increase operating costs by approximately $80,000 per year, beginning in FY 2022, to maintain approximately 2 miles of new levees and flood walls, and for activities such as vegetation spraying and graffiti removal.

USEFUL LIFE: 30+ Years

Project	**Berryessa Creek, Lower Penitencia Creek to Calaveras Boulevard**
Program	Flood Protection – Coyote Watershed
Priority No.	68
Project No.	40174004s
District Contact	Ngoc Nguyen nnguyen@valleywater.org

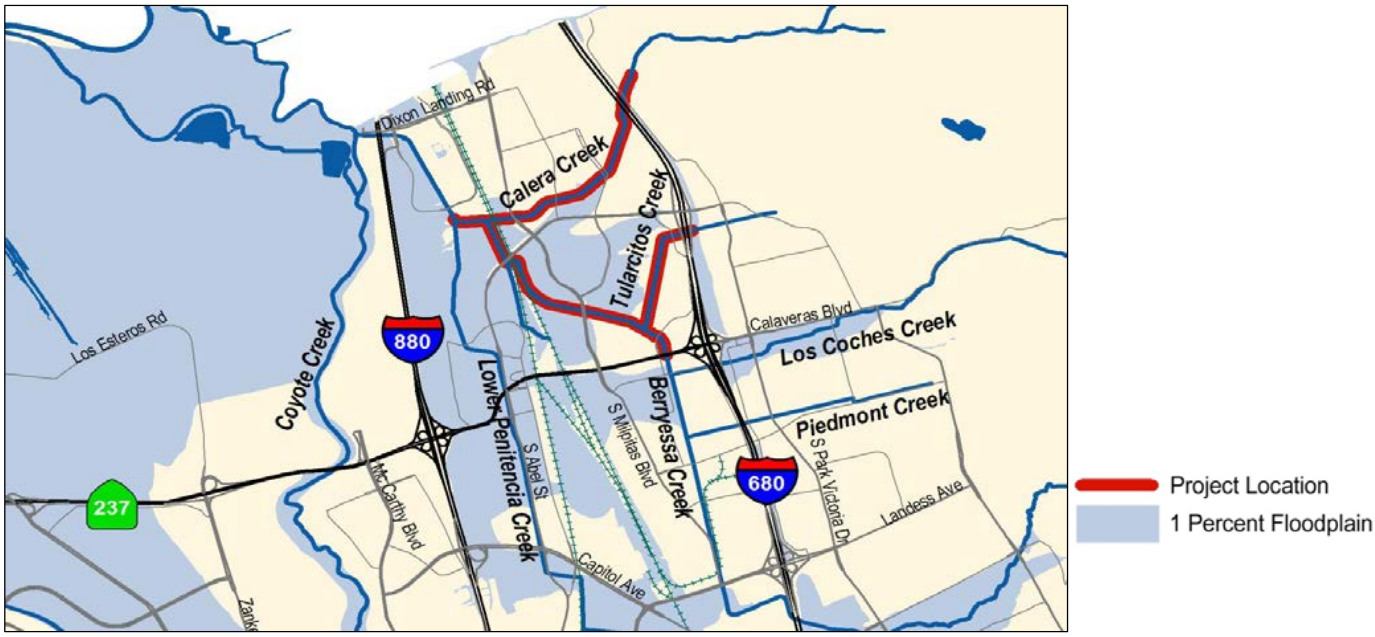
Berryessa Creek upstream of the confluence with Lower Penitencia Creek

PROJECT DESCRIPTION

This project plans, designs, and constructs improvements along approximately 3 miles of Berryessa Creek and its tributaries, from the confluence with Lower Penitencia Creek to Calaveras Boulevard (Phase 1 and 2) and both Calera and Tularcitos Creeks (Phase 3), to accomplish the following objectives:

- Provide one-percent flood protection to 1,823 homes, businesses, and public buildings in the surrounding area.
- Improve the structural integrity of the levees.
- Improve maintenance access and safety for District staff.
- Identify opportunities to integrate recreation inputs consistent with the City of Milpitas' Trail Master Plan.
- Obtain a Letter of Map Revision (LOMR) from the Federal Emergency Management Agency (FEMA).
- Incorporate the District's Clean, Safe Creeks and Natural Flood Protection (NFP) Program Objectives.

PROJECT LOCATION

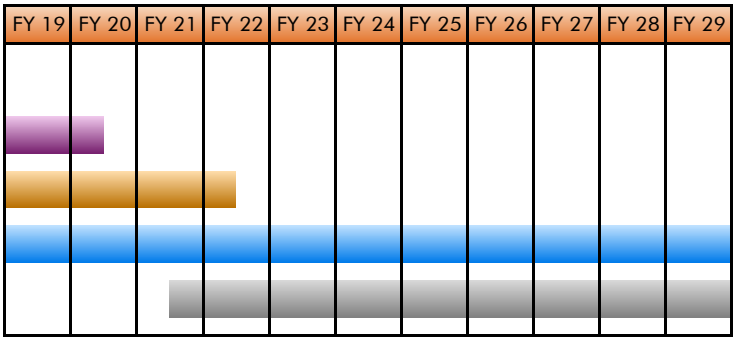


SCHEDULE & STATUS

March 2001 to June 2027

Planning phase is complete. Construction includes three phases and three years of plant establishment monitoring.

Phase	Cost
Plan	8,152
Permits	2,112
Design	13,401
Construct	142,583
Closeout	69
	177,892



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY18	FY19	FY20	FY21	FY22	FY23	FY24	Future	
40174004-Berryessa Creek, Lower Penitencia Creek to Calaveras Boulevard Phase 1	46,697	100	105	100	100	0	0	0	47,102
with inflation	46,697	100	105	109	114	0	0	0	47,125
40174005-Berryessa Creek, Lower Penitencia Creek to Calaveras Boulevard Phase 2	55,253	17,734	2,508	970	350	0	0	0	76,815
with inflation	55,253	17,734	2,508	1,059	399	0	0	0	76,954
40C40397-Berryessa Creek, Lower Penitencia Creek to Calaveras Boulevard Phase 3	0	0	0	0	0	0	0	53,975	53,975
with inflation	0	0	0	0	0	0	0	73,203	73,203
TOTAL	**101,950**	**17,834**	**2,613**	**1,070**	**450**	**0**	**0**	**53,975**	**177,892**
with inflation	**101,950**	**17,834**	**2,613**	**1,168**	**514**	**0**	**0**	**73,203**	**197,282**

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY18	FY19		FY20	FY21	FY22	FY23	FY24	Future	
40174004-Berryessa Creek, Lower Penitencia Creek to Calaveras Boulevard Phase 1	50,191	0	3,394	0	0	0	0	0	0	50,191
40174005-Berryessa Creek, Lower Penitencia Creek to Calaveras Boulevard Phase 2	58,402	17,473	2,888	0	679	399	0	0	0	76,954
40C40397-Berryessa Creek, Lower Penitencia Creek to Calaveras Boulevard Phase 3	0	0	0	0	0	0	0	0	73,203	73,203
TOTAL	**108,593**	**17,473**	**6,282**	**0**	**679**	**399**	**0**	**0**	**73,203**	**200,348**

Adjusted Budget includes adopted budget plus approved budget adjustments. Allocated funding exceeds planned expenditures by approximately $3,066,000. Excess funds will be returned to Fund Reserves at the close of the project.

FUNDING SOURCES

(in thousands $)

SCVWD Watershed Stream Stewardship Fund	185,334
Department of Water Resources (Prop 1E)	15,014
Total	**200,348**

OPERATING COST IMPACTS

The completion of this project is anticipated to increase annual operating costs by approximately $70,000 per year. Operating costs will increase with completion of construction of each of three phases: beginning with a $35,000 increase in FY 2018 (one year after completion of Phase 1), increasing to $45,000 in FY 2023 (one year after completion of Phase 2), and finally increasing to $70,000 in FY 2028 (one year after completion of Phase 3). These costs will be for increased maintenance activities such as sediment removal, vegetation management, levee maintenance, graffiti abatement, and trash & debris cleanup.

USEFUL LIFE: 30+ Years

Project	**Coyote Creek, Montague Expressway to Tully Road**
Program	Flood Protection – Coyote Watershed
Priority No.	62
Project No.	26174043
District Contact	Melanie Richardson VGin@valleywater.org

Flooding from Coyote Creek on 17th Street near Downtown San Jose in January 1997

PROJECT DESCRIPTION

This project plans, designs, and constructs improvements along approximately 9 miles of Coyote Creek, from Montague Expressway to Tully Road, to accomplish the following objectives:

- To reduce the risk of flooding to homes, schools, businesses, and highways from a 20-25-year flood event (February 2017 event), from Montague Expressway to Tully Road.
- Improve water quality, enhance stream habitat, and provide recreational opportunities.
- Incorporate revegetation and aesthetic elements of the Coyote Creek park chain.
- Minimize long-term maintenance needs.

This project meets the commitments of the voter approved Safe, Clean Water Program. For a full description of the SCW benefits and KPI's, please visit www.valleywater.org.

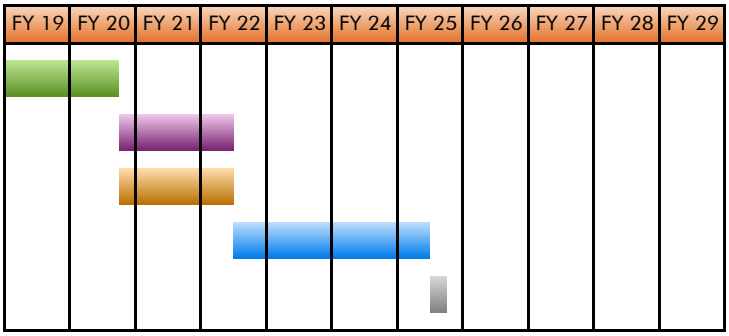
PROJECT LOCATION

Project Location

SCHEDULE & STATUS

November 2017 to March 2025

Phase	Cost
Plan	8,781
Permits	664
Design	6,864
Construct	21,169
Closeout	206
	37,988



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY18	FY19	FY20	FY21	FY22	FY23	FY24	Future	
26174043-Coyote Creek, Montague Expressway to Tully Road	12,347	2,160	941	975	6,400	8,750	6,090	325	37,988
with inflation	12,347	2,160	941	1,065	7,110	9,898	7,163	423	41,108

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY18	FY19		FY20	FY21	FY22	FY23	FY24	Future	
26174043-Coyote Creek, Montague Expressway to Tully Road	12,248	2,259	0	941	1,065	7,110	9,898	7,163	423	41,108

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Clean, Safe Creeks and Natural Flood Protection Fund	41,108
Other Funding Source	0
Total	41,108

OPERATING COST IMPACTS

The completion of this project is anticipated to increase operating costs by approximately $100,000 per year, beginning in FY 2026. Currently the District has limited and sporadic property rights within the project limits along the creek, and ongoing maintenance costs are relatively small. Project implementation may include acquisition of continuous right of way for construction and future operations and maintenance.

USEFUL LIFE: 30+ Years

Project	**Cunningham Flood Detention Certification**
Program	Flood Protection – Coyote Watershed
Priority No.	83
Project No.	40264011
District Contact	Ngoc Nguyen NNguyen@valleywater.org

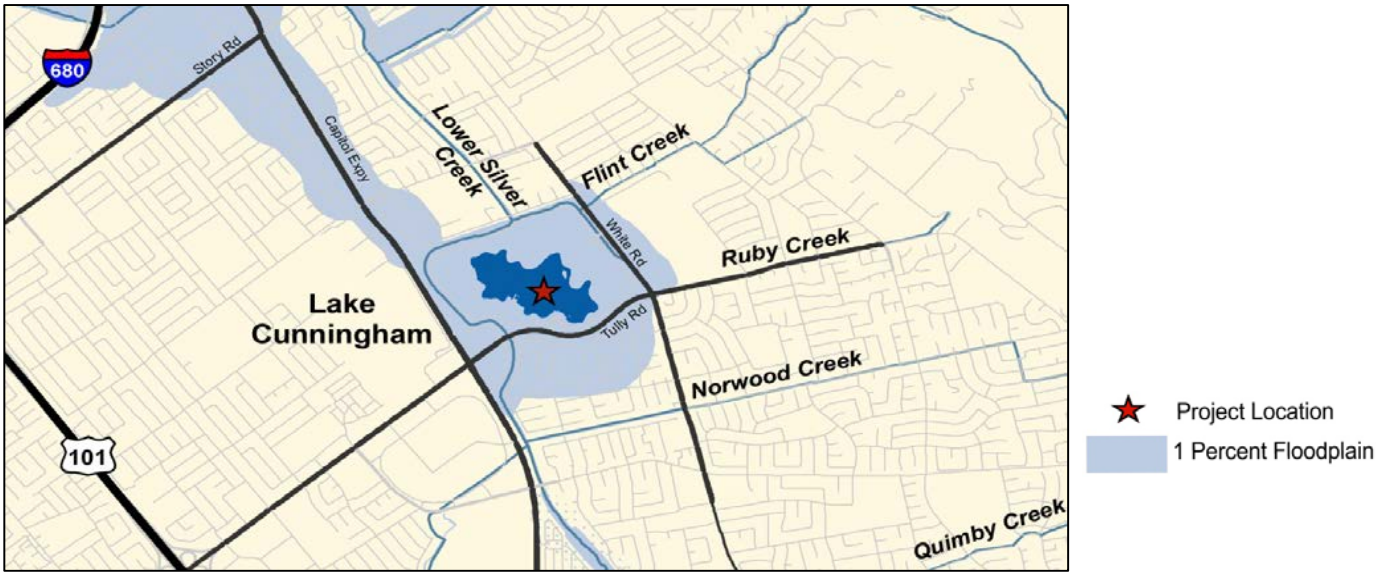
Flooding from Lower Silver Creek in February 1969 at the future site of Lake Cunningham Regional Park

PROJECT DESCRIPTION

This project plans, designs, and constructs final improvements at Lake Cunningham Regional Park (Park) to ensure the site operates as a flood detention facility in accordance with the 1978 agreement with the City of San Jose (City) and to ensure the Lower Silver Creek Project (LSC Project) improvements downstream of Cunningham Avenue function as designed. This project will accomplish the following objectives:

- Validate that the flood detention facility can attenuate the volume of water associated with 2,249 cfs below the park land elevation as stipulated in the 1978 Joint Use Agreement between the City and the District.
- Obtain Federal Emergency Management Agency (FEMA) certification of the flood detention facility and Lower Silver Creek improvements north of the Park to revise the applicable flood insurance rate maps in the Lower Silver Creek 1-percent floodplain near the north of the Park.
- Update the 1978 Joint Use Agreement between the City and the District to meet the flood detention facility's validated condition.

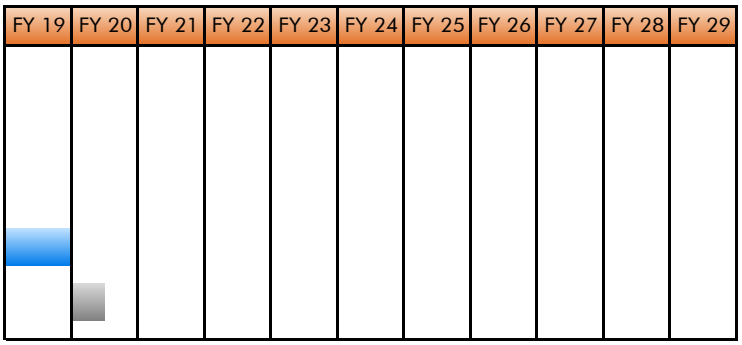
PROJECT LOCATION



SCHEDULE & STATUS

August 1999 to Decmber 2019

Phase	Cost
Plan	2,323
Permits	320
Design	2,195
Construct	2,442
Closeout	15
	11,516



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY18	FY19	FY20	FY21	FY22	FY23	FY24	Future	
40264011-Cunningham Flood Detention Certification	9,149	2,050	287	30	0	0	0	0	11,516
with inflation	9,149	2,050	287	33	0	0	0	0	11,519

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY18	FY19		FY20	FY21	FY22	FY23	FY24	Future	
40264011-Cunningham Flood Detention Certification	9,961	1,290	52	235	33	0	0	0	0	11,519

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Watershed Stream Stewardship Fund	6,219
California Department of Water Resources	1,000
Natural Resource Conservation Service	4,300
Total	11,519

OPERATING COST IMPACTS

The completion of this project is not anticipated to increase or decrease annual operations costs. The project is within District jurisdiction and it is designed to minimize maintenance activities such as sediment removal, so as to have minimal or no additional impact to the operating budget.

USEFUL LIFE: 30+ Years

Project	**Lower Penitencia Creek Improvements, Berryessa to Coyote Creeks**
Program	Flood Protection – Coyote Watershed
Priority No.	65
Project No.	40334005
District Contact	Ngoc Nguyen NNguyen@valleywater.org

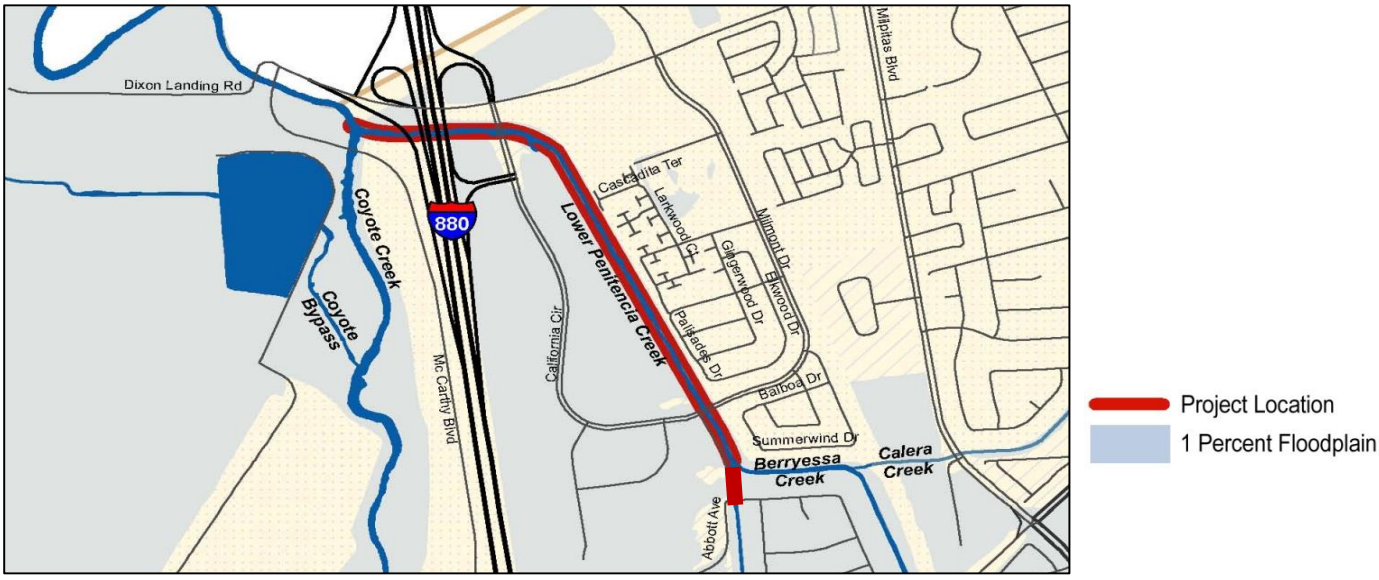
Lower Penitencia Creek, looking downstream from Milmont Drive

PROJECT DESCRIPTION

This project plans, designs, and constructs improvements along approximately 1 mile of Lower Penitencia Creek from the downstream confluence with Coyote Creek to the upstream face of San Andreas Drive, to accomplish the following objectives:

- Convey the Lower Berryessa Creek one-percent design flow.
- Meet required water surface elevations at Coyote Creek and Berryessa Creek confluences.
- Minimize the need for seasonal removal of sediment and non-woody vegetation.
- Maintain existing FEMA accreditation along the east levee located between California Circle and Berryessa Creek.
- Enable FEMA certification of the improvements.

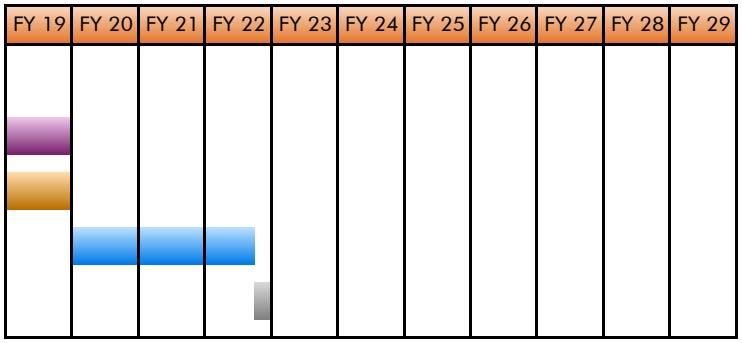
PROJECT LOCATION



SCHEDULE & STATUS

October 2010 to June 2022

Phase	Cost
Plan	3,544
Permits	461
Design	3,615
Construct	18,283
Closeout	20
	26,656



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY18	FY19	FY20	FY21	FY22	FY23	FY24	Future	
40334005-Lower Penitencia Creek Improvements, Berryessa to Coyote Creeks	7,787	6,870	10,629	550	550	270	0	0	26,656
with inflation	7,787	6,870	10,629	601	628	322	0	0	26,836

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY18	FY19		FY20	FY21	FY22	FY23	FY24	Future	
40334005-Lower Penitencia Creek Improvements, Berryessa to Coyote Creeks	14,416	1,881	1,640	8,989	601	628	322	0	0	26,836

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Watershed Stream Stewardship Fund	21,836
Department of Water Resources (Prop 1E)	5,000
Total	**26,836**

OPERATING COST IMPACTS

Operating cost impacts will be established during the design phase.

USEFUL LIFE: 50 Years

Project	**Lower Silver Creek, I-680 to Cunningham Avenue (R4-6) Flood Protection Project**
Program	Flood Protection – Coyote Watershed
Priority No.	98
Project No.	40264008s
District Contact	Christopher Hakes CHakes@valleywater.org

Lower Silver Creek looking upstream from Capital Expressway

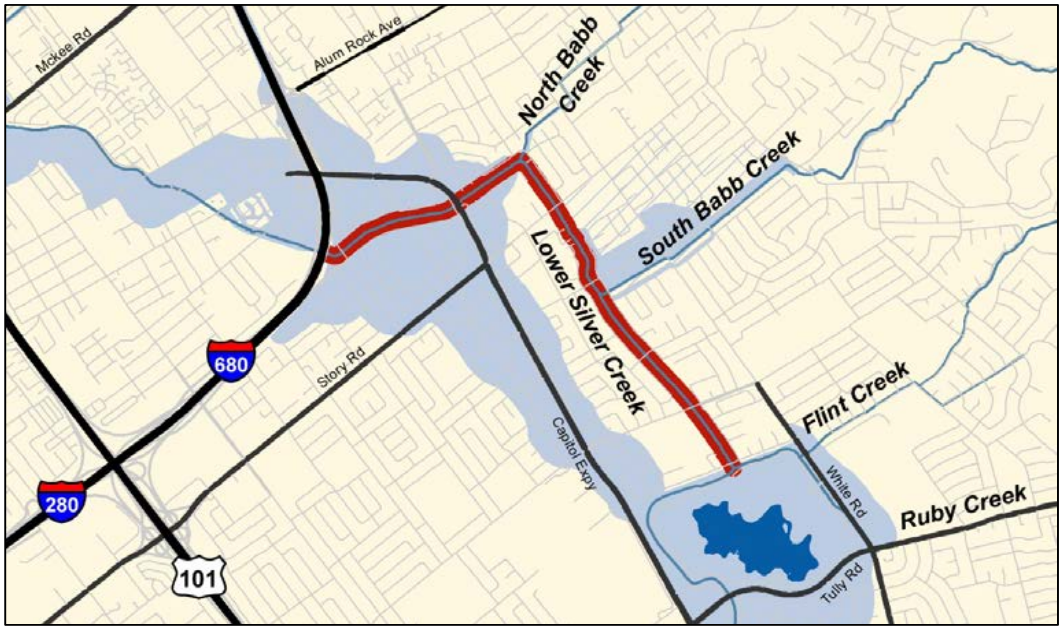
PROJECT DESCRIPTION

This project is part of a flood control project that partners with the Natural Resource Conservation Service (NRCS) to plan, design and construct improvements along approximately 2.3 miles of Lower Silver Creek, from Interstate 680 to Lake Cunningham. This project includes elements that are eligible for reimbursement from the state and federal governments to accomplish the following objectives:

- Increase flood protection to 3,800 parcels in the surrounding area.
- Allow for on-site mitigation of project impacts, and in some cases enhancement of existing habitat values by increased wetlands and riparian habitat.
- Improve vehicle and pedestrian bridges crossing Lower Silver Creek.
- Develop with the City of San Jose the footprint for a future trail project between Capitol Avenue-Frontage Road and Jackson Avenue that ensures pedestrians and bicyclists may travel beneath the Dobern Pedestrian Bridge.

This project is accounted for in the following job numbers:
- 40264007 Lower Silver Creek, I-680 to N. Babb Rd. (Reach 4 Planning) - Completed
- 40264008 Lower Silver Creek, I-680 to Cunningham Rd. (Reaches 4-6)
- 40264012 Lower Silver Creek (Reaches 4-6) Reimbursable

PROJECT LOCATION



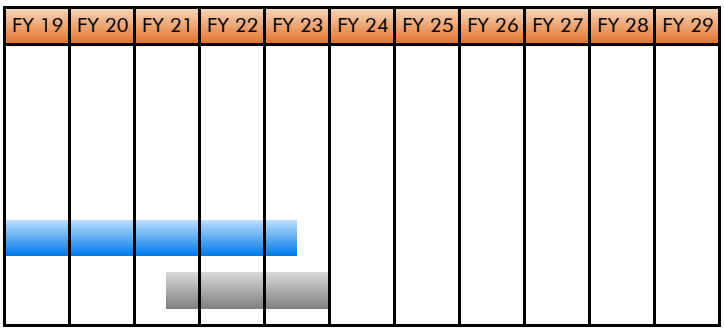
Project Location
1 Percent Floodplain

SCHEDULE & STATUS

August 2008 to June 2023

Planning and Design phases are complete

Phase	Cost
Plan	6,308
Permits	206
Design	10,923
Construct	80,831
Closeout	91
	101,768



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY18	FY19	FY20	FY21	FY22	FY23	FY24	Future	
40264007-Lower Silver Creek, Reach 4 Planning	2,371	0	0	0	0	0	0	0	2,371
with inflation	2,371	0	0	0	0	0	0	0	2,371
40264008-Lower Silver Ck, Nonreimbursable (R4-6)	94,390	1,838	777	160	50	50	0	0	97,265
with inflation	94,390	1,838	777	174	57	60	0	0	97,295
40264012-Lower Silver Creek, LERRDs (R4-6)	1,897	132	63	40	0	0	0	0	2,132
with inflation	1,897	132	63	44	0	0	0	0	2,136
TOTAL	98,658	1,970	840	200	50	50	0	0	101,768
with inflation	98,658	1,970	840	217	57	60	0	0	101,802

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY18	FY19		FY20	FY21	FY22	FY23	FY24	Future	
40264007-Lower Silver Creek, Reach 4 Planning	2,371	0	0	0	0	0	0	0	0	2,371
40264008-Lower Silver Ck, Nonreimbursable (R4-6)	95,759	507	38	739	174	57	60	0	0	97,295
40264012-Lower Silver Creek, LERRDs (R4-6)	2,912	0	883	0	0	0	0	0	0	2,912
TOTAL	101,042	507	921	739	174	57	60	0	0	102,578

Adjusted Budget includes adopted budget plus approved budget adjustments. Funding exceeds planned expenditures by approximately $776,000. Excess funding will be returned to reserves upon completion of the project.

FUNDING SOURCES

(in thousands $)

SCVWD Watershed Stream Stewardship Fund	49,488
State of California	8,414
Natural Resource Conservation Service - ARRA	20,676
California Department of Water Resources	24,000
Total	102,578

OPERATING COST IMPACTS

Operating budget impacts from construction of this project are expected to be insignificant. Repair of several erosion sites will reduce maintenance needs, but will not affect overall sediment removal or vegetation control practices. Some maintenance costs will include graffiti removal on floodwalls.

USEFUL LIFE: 50+ Years

Project	**Upper Penitencia Creek, Coyote Creek to Dorel Drive**
Program	Flood Protection – Coyote Watershed
Priority No.	66
Project No.	40324003s
District Contact	Melanie Richardson vgin@valleywater.org

Flooding at King Road on Upper Penitencia Creek

PROJECT DESCRIPTION

Initially, this project partnered with the U.S. Army Corps of Engineers (Corps) to plan, design, and construct improvements along approximately 4.2 miles of Upper Penitencia Creek, from the confluence with Coyote Creek to Dorel Drive, to accomplish the objectives listed below. In 2016, the Corps decided that the multi-objective project which is appropriate for this creek could not be funded under the existing single-purpose authorization. The Project was not included in the Corp's 2017 workplan.

Objectives:

- Provide one-percent flood protection to more than 5,000 homes, businesses, and public buildings.
- Improve stream habitat values and fisheries potential.
- Reduce sedimentation and maintenance requirements.
- Identify opportunities to integrate recreation improvements consistent with the City of San Jose's Master Plans, the County's Penitencia Creek Master Plan, and Santa Clara Countywide Trails Master Plan.
- Incorporate the District's Clean, Safe Creeks and Natural Flood Protection (NFP) Program Objectives.

This project is accounted for in the following job numbers:

- 40324003 Conduct initial stages of Planning Phase through FY18.
- 26324001 Safe Clean Water Program

This project meets the commitments of the voter approved Safe, Clean Water Program, Project E4. For a full description of the SCW benefits and KPI's, please visit www.valleywater.org.

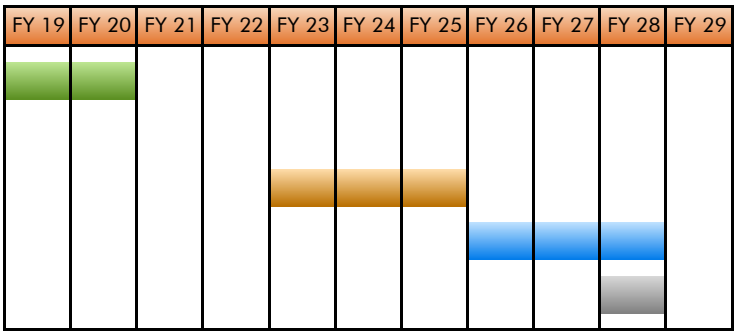
PROJECT LOCATION

Project Location
1 Percent Floodplain

SCHEDULE & STATUS

July 2000 to December 2019

Phase	Cost
Plan	8,198
Permits	1,706
Design	5,092
Construct	31,916
Closeout	154
	47,289



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY18	FY19	FY20	FY21	FY22	FY23	FY24	Future	
40324003-Upper Penitencia Ck, Coyote Ck to Dorel Dr, Corps	9,454	10	0	0	0	0	0	0	9,464
with inflation	9,454	10	0	0	0	0	0	0	9,464
40324005-Upper Penitencia Ck, Coyote Ck to Dorel Dr, LERRDs	2,257	100	10	0	0	0	0	0	2,367
with inflation	2,257	100	10	0	0	0	0	0	2,367
26324001-Upper Penitencia Ck, Coyote Ck to Dorel Dr	0	1,910	1,305	0	0	200	1,811	30,232	35,458
with inflation	0	1,910	1,305	0	0	239	2,257	38,304	44,014
TOTAL	**11,711**	**2,020**	**1,315**	**0**	**0**	**200**	**1,811**	**30,232**	**47,289**
with inflation	**11,711**	**2,020**	**1,315**	**0**	**0**	**239**	**2,257**	**38,304**	**55,845**

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY18	FY19		FY20	FY21	FY22	FY23	FY24	Future	
40324003-Upper Penitencia Ck, Coyote Ck to Dorel Dr, Corps	8,970	494	0	0	0	0	0	0	0	9,464
40324005-Upper Penitencia Ck, Coyote Ck to Dorel Dr, LERRDs	7,347	0	4,990	0	0	0	0	0	0	7,347
26324001-Upper Penitencia Ck, Coyote Ck to Dorel Dr	385	1,525	0	1,305	0	0	239	2,257	38,304	44,014
TOTAL	**16,702**	**2,019**	**4,990**	**1,305**	**0**	**0**	**239**	**2,257**	**38,304**	**60,825**

Adjusted Budget includes adopted budget plus approved budget adjustments. Approved Funding exceeds planned expenditures by approximately $4,980,000. Excess funding will be returned to reserves at the end of the project.

FUNDING SOURCES

(in thousands $)

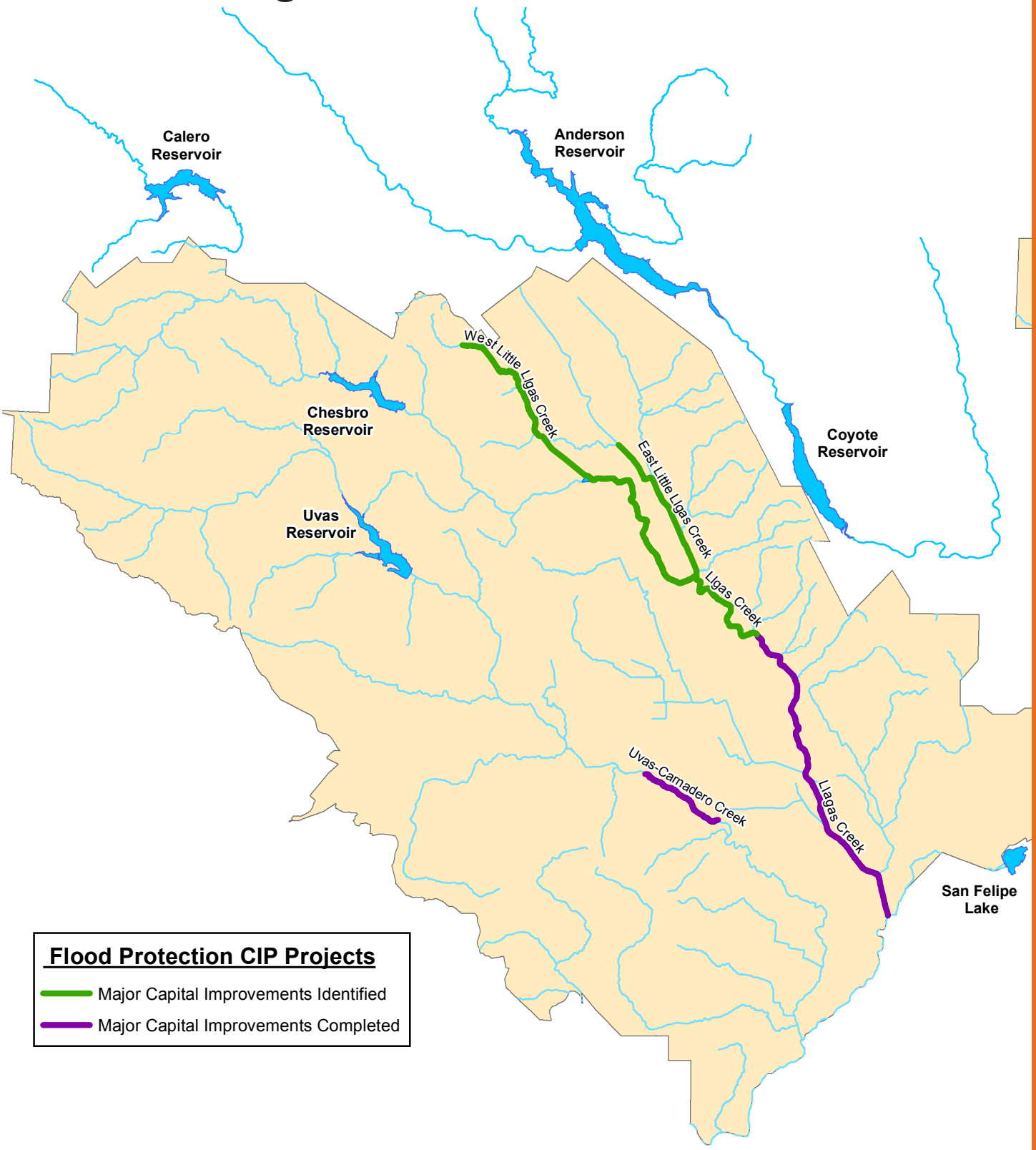
SCVWD Watershed Stream Stewardship Fund	16,811
SCVWD Safe, Clean Water Fund	44,014
Total	**60,825**
U.S. Army Corps of Engineers - In-kind Services	102,720

OPERATING COST IMPACTS

Operating cost impacts will be provided after completion of the planning phase.

USEFUL LIFE: Not Available

Uvas/Llagas Watersheds



Project	**Llagas Creek–Lower, Capacity Restoration, Buena Vista Avenue to Pajaro River**
Program	Flood Protection – Uvas/Llagas Watershed
Priority No.	65
Project No.	50284010
District Contact	Christopher Hakes CHakes@valleywater.org

Lower Llagas Creek near Pajaro River

PROJECT DESCRIPTION

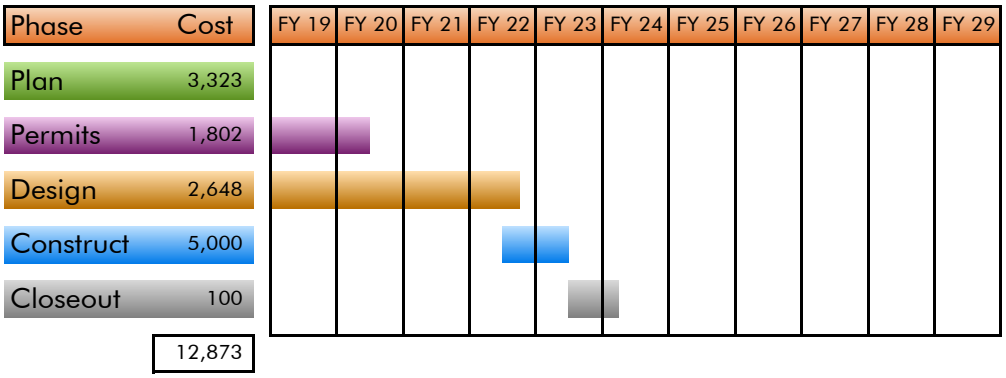
This project plans, designs, and constructs improvements on approximately 7.15 miles of Lower Llagas Creek, from Buena Vista Avenue to Pajaro River, to accomplish the following objectives:

- Evaluate the current flood risk in the area surrounding the project versus the design level flood risk.
- Develop options to provide flood protection for Lower Llagas Creek Reaches 2 and 3 in accordance with Federal Emergency Management Agency (FEMA) criteria where applicable.
- Identify feasible opportunities for environmental restoration and corridor preservation.
- Coordinate planning, design, and construction efforts with the South County Regional Wastewater Authority (SCRWA).

PROJECT LOCATION

SCHEDULE & STATUS

September 2008 to July 2023



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY18	FY19	FY20	FY21	FY22	FY23	FY24	Future	
50284010-Llagas Creek–Lower, Capacity Restoration, Buena Vista Avenue to Pajaro River	3,323	1,515	815	820	950	2,850	2,600	0	12,873
with inflation	3,323	1,515	815	895	1,084	3,265	2,999	0	13,896

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY18	FY19		FY20	FY21	FY22	FY23	FY24	Future	
50284010-Llagas Creek–Lower, Capacity Restoration, Buena Vista Avenue to Pajaro River	7,046	0	2,208	0	0	587	3,265	2,999	0	13,896

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Watershed Stream Stewardship Fund	12,776
State of California	1,120
Total	13,896

OPERATING COST IMPACTS

Operating costs will be determined during the design phase.

USEFUL LIFE: 30+ Years

Project	**Llagas Creek–Upper, Buena Vista Avenue to Llagas Road**
Program	Flood Protection – Uvas/Llagas Watershed
Priority No.	70
Project No.	26174051s
District Contact	Christopher Hakes CHakes@valleywater.org

Llagas Creek floods at Watsonville Road and the surrounding area

PROJECT DESCRIPTION

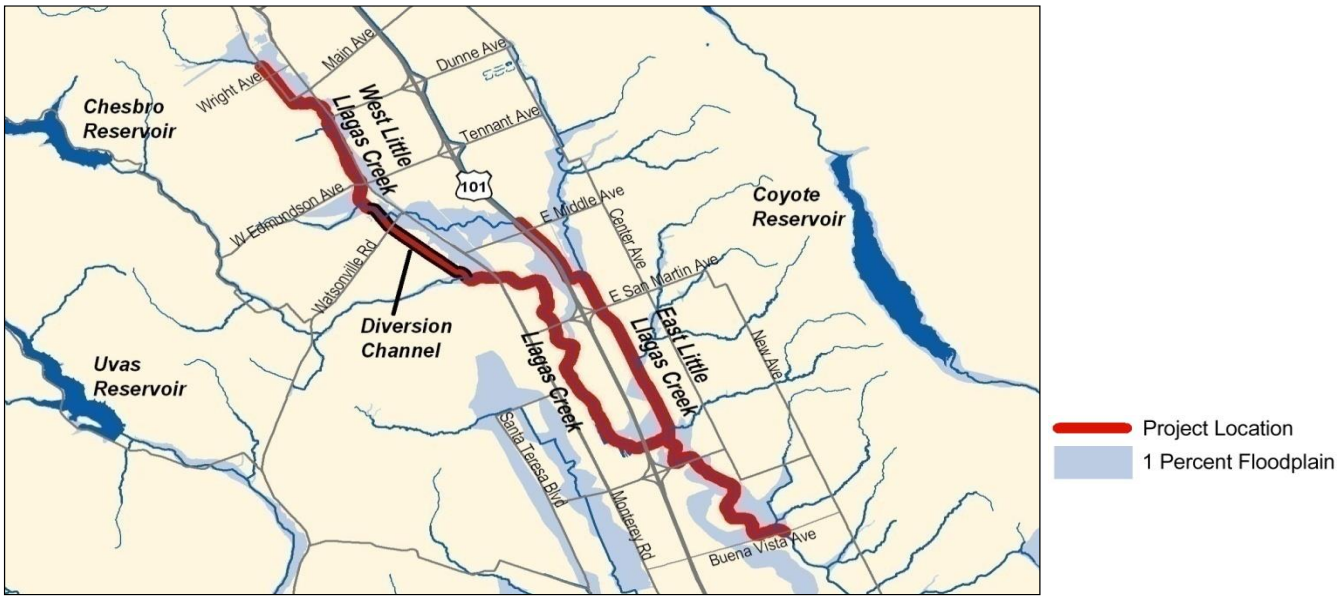
This project continues a Clean, Safe Creeks project in partnership with the U.S. Army Corps of Engineers (USACE) and the state to plan, design, and construct improvements along 13.9 miles of channel. The project extends from Buena Vista Avenue to Llagas Road, including West Little Llagas Creek in downtown Morgan Hill. The federally authorized preferred project protects the urban area of Morgan Hill from a 1% (or 100-year) flood, and reduces the frequency of flooding in surrounding areas. Construction includes channel modifications and replacement of road crossings. The District continues to work with Congress to aggressively pursue federal funds to bring this project to full fruition. In 2012, project limits were extended 2,700 feet upstream to Llagas Road to address public concerns.

This project is accounted for in the following job numbers:

- 26174051- Reaches 4-8 & 14 - Reimbursable - Lands, Easements, Rights of Way, Relocation, & Disposal (LERRDs)
- 26174052- Reaches 4-8 & 14 - Construction/Coordination with the Corps
- 26174053- Technical Studies (completed)
- 26174054- Design
- 50C40335- Construction, Reach 5, 6, & 7b

This project meets the commitments of the voter approved Safe, Clean Water Program, Project E6. For a full description of the SCW benefits and KPI's, please visit www.valleywater.org.

PROJECT LOCATION

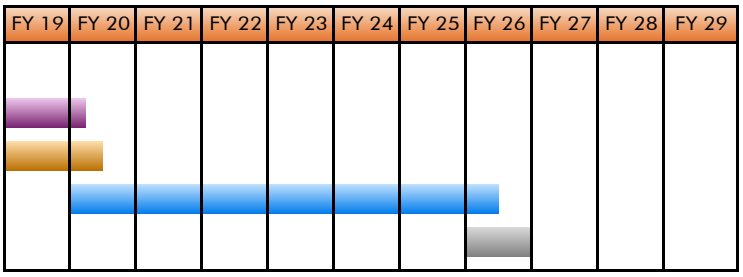


SCHEDULE & STATUS

July 2000 to June 2026

Project schedule may vary considerably and is dependent upon the Corps and Congress.

Phase	Cost
Plan	3,729
Permits	4,693
Design	63,072
Construction	165,698
Closeout	200
	242,783



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**Future**	
26174051-Llagas Ck—Upper, LERRDs	34,939	5,225	4,875	0	0	0	0	0	45,039
with inflation	34,939	5,225	4,875	0	0	0	0	0	45,039
26174052-Llagas Ck—Upper, Corps Coordination	8,248	19,437	22,951	32,250	32,250	22,250	2,650	3,050	143,086
with inflation	8,248	19,437	22,951	33,357	33,468	23,283	2,763	3,306	146,814
26174053-Llagas Ck—Upper, Technical Studies	1,446	0	0	0	0	0	0	0	1,446
with inflation	1,446	0	0	0	0	0	0	0	1,446
26174054-Llagas Ck—Upper, Design	21,760	6,430	261	250	250	250	200	301	29,702
with inflation	21,760	6,430	261	273	285	298	249	401	29,957
50C40335-Llagas Ck—Upper, Construction Rch 5, 6, & 7b	0	0	17,510	6,000	0	0	0	0	23,510
with inflation	0	0	17,510	6,365	0	0	0	0	23,875
TOTAL	**66,393**	**31,092**	**45,597**	**38,500**	**32,500**	**22,500**	**2,850**	**3,351**	**242,783**
with inflation	**66,393**	**31,092**	**45,597**	**39,995**	**33,754**	**23,581**	**3,012**	**3,707**	**247,132**

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	**FY18**	**FY19**		**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**Future**	
26174051-Llagas Ck—Upper, LERRDs	43,057	0	2,893	1,982	0	0	0	0	0	45,039
26174052-Llagas Ck—Upper, Corps Coordination	40,895	0	13,210	9,741	33,357	33,468	23,283	2,763	3,306	146,814
26174053-Llagas Ck—Upper, Technical Studies	1,446	0	0	0	0	0	0	0	0	1,446
26174054-Llagas Ck—Upper, Design	22,692	5,498	0	261	273	285	298	249	401	29,957
50C40335-Llagas Ck—Upper, Construction Rch 5, 6, & 7b	0	0	0	17,510	6,365	0	0	0	0	23,875
TOTAL	**108,090**	**5,498**	**16,103**	**29,494**	**39,995**	**33,754**	**23,581**	**3,012**	**3,707**	**247,132**

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Clean, Safe Creeks and Natural Flood Protection Fund	17,900
SCVWD Safe Clean Water Program Fund	125,464
Watershed Stream Stewardship Fund	23,875
State of California	29,552
City of Morgan Hill	3,341
NRCS Grants (Unsecured)	47,000
Total	**247,132**
U.S. Army Corps of Engineers - In-kind Services	65,000

OPERATING COST IMPACTS

Operating cost impacts will be provided after completion of the design phase.

USEFUL LIFE: 30+ Years

Multiple Watersheds

Flood Protection CIP Projects

Major Capital Improvements Identified

NOTE:
Location of Erosion Repair projects are not identified on this map.

Project	**San Francisco Bay Shoreline**
Program	Flood Protection – Multiple Watersheds
Priority No.	74
Project No.	00044026s
District Contact	Ngoc Nguyen NNguyen@valleywater.org

Typical natural tidal marshland in San Francisco Bay near the Shoreline project area

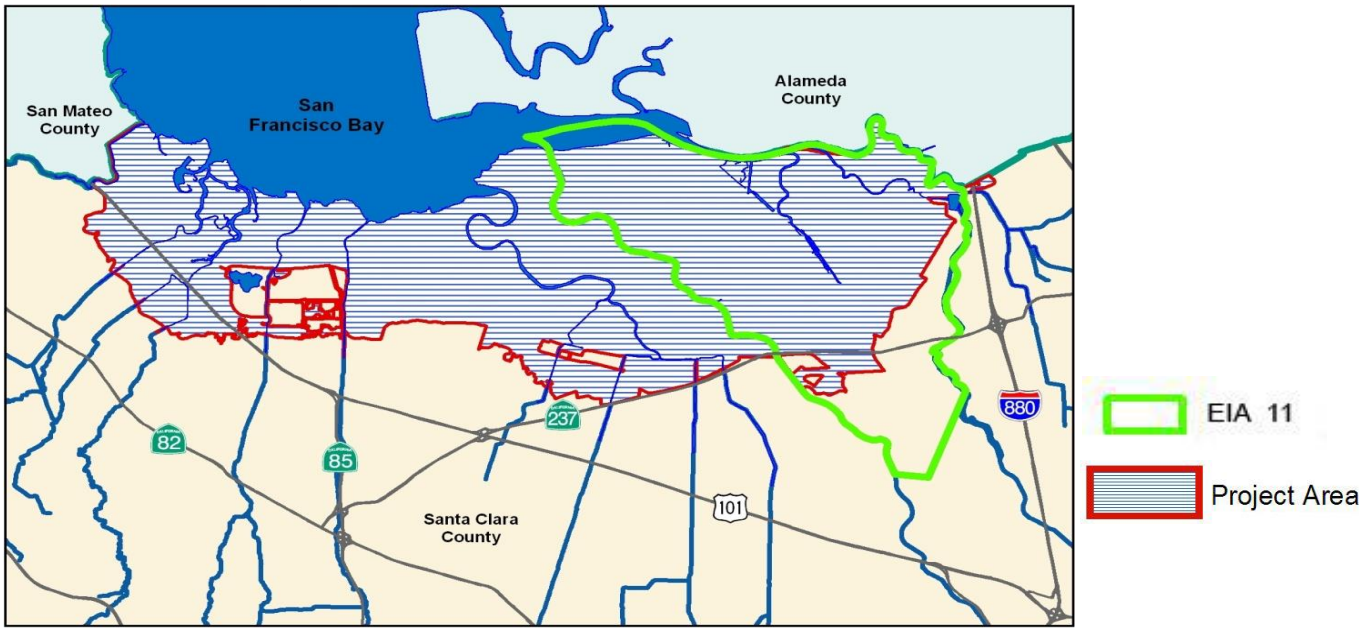
PROJECT DESCRIPTION

This project partners with the California Coastal Conservancy, U.S. Army Corps of Engineers (Corps), and key stakeholders to conduct an integrated, multi-objective project along the San Francisco Bay Shoreline. Project number 00044026 funded the Corps Feasibility Study effort for the North San Jose area, known as Economic Impact Area 11 (EIA 11) which was completed in FY 17; this project number will continue to fund other Shoreline efforts outside of the Safe, Clean Water (SCW) project numbers. The District share of the EIA 11 flood risk management design and construction is $46.8M. It is expected that a grant from Measure AA will partially fund this project. SCW funds will provide $15 million toward the District's cost share of the design and partial construction efforts for EIA 11 and $5 million toward the District's cost share of the planning and design efforts for the remaining EIAs to accomplish the following objectives:

- Provide integrated fluvial and one-percent coastal flood protection.
- Provide protection for future sea level rise.
- Restore and/or enhance tidal marsh and related habitats.
- Provide recreational and public access opportunities.
- Pursue continued federal funding.
- Obtain a LOMR from the Federal Emergency Management Agency at completion of the Construction Phase.
- Coordinate closely with the South Bay Salt Pond Restoration Project, City of San Jose, U.S. Fish and Wildlife Services, the community and key stakeholders.

This project meets the commitments of the voter approved Safe, Clean Water Program, Project E7. For a full description of the SCW benefits and KPI's, please visit www.valleywater.org.

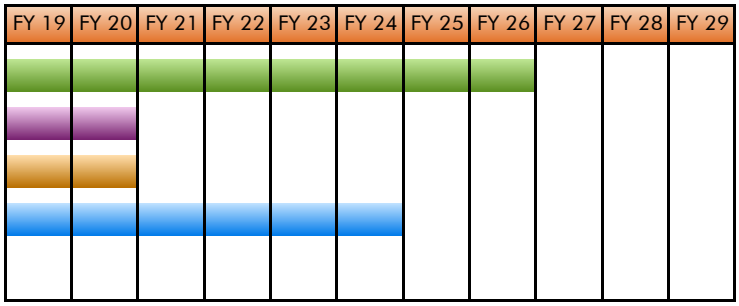
PROJECT LOCATION



SCHEDULE & STATUS

July 2005 to June 2026

Phase	Cost
Plan	18,154
Permits	265
Design	9,677
Construct	61,068
Closeout	-
	89,327



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY18	FY19	FY20	FY21	FY22	FY23	FY24	Future	
00044026-San Francisco Bay Shoreline	13,790	2,600	2,653	17,301	5,000	16,000	8,500	0	65,844
with inflation	13,790	2,600	2,653	18,386	5,512	18,075	9,941	0	70,957
62044042-Shoreline Early Implementation	359	0	0	0	0	0	0	0	359
with inflation	359	0	0	0	0	0	0	0	359
26444001-EIA 11 Design & Part Construction	2,500	7,940	7,070	0	0	0	0	0	17,510
with inflation	2,500	7,940	7,070	0	0	0	0	0	17,510
26444002-Other EIAs Planning	1,991	200	523	500	500	500	500	900	5,614
with inflation	1,991	200	523	546	571	596	623	1,195	6,245
TOTAL	**18,640**	**10,740**	**10,508**	**17,801**	**5,500**	**16,500**	**9,000**	**900**	**89,327**
with inflation	**18,640**	**10,740**	**10,246**	**18,932**	**6,083**	**18,671**	**10,564**	**1,195**	**95,071**

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY18	FY19		FY20	FY21	FY22	FY23	FY24	Future	
00044026-San Francisco Bay Shoreline	17,278	0	888	1,765	18,386	5,512	18,075	9,941	0	70,957
62044042-Shoreline Early Implementation	359	0	0	0	0	0	0	0	0	359
26444001-EIA 11 Design & Part Construction	7,794	6,722	4,076	2,994	0	0	0	0	0	17,510
26444002-Other EIAs Planning	3,757	0	1,566	0	0	74	596	623	1,195	6,245
TOTAL	**29,188**	**6,722**	**6,530**	**4,759**	**18,386**	**5,586**	**18,671**	**10,564**	**1,195**	**95,071**

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Watershed Stream Stewardship Fund	7,419
SCVWD Clean, Safe Creeks and Natural Flood Protection Fund (Environmental Enhancement Grant)	2,011
SCVWD Safe, Clean Water and Natural Flood Protection Fund	23,755
California Department of Water Resources (Pending)	420
SFBRA Measure AA	61,466
Total	**95,071**
Federal Partners, South Bay Salt Ponds (SBSP)	48,470
State, SBSP	14,720
Foundations, Packard-Hewlett-Goldman-Moore, SBSP	17,060
Coastal Conservancy, Shoreline	2,010
Federal, Corps of Engineers, Shoreline	8,990
Total Partnership Funding for In-kind Services	**91,250**

OPERATING COST IMPACTS

Operating costs will be determined during the planning phase.

USEFUL LIFE: Not Available

Project	**Watersheds Asset Rehabilitation Program**
Program	Flood Protection - Multiple Watersheds
Priority No.	74
Project No.	62084001
District Contact	Ngoc Nguyen NNguyen@valleywater.org

View of damage caused by burrowing animals along West Branch of Llagas Creek in the Uvas/Llagas Watershed

PROJECT DESCRIPTION

This project plans, designs, and constructs repairs to levee and stream bank sites that have erosion damage. Each site requires a different type of repair based on location, severity, and velocities in the creek. The objective of this project is to restore the stream bank or levee to a stable condition so as to reduce the risk of flooding and/or damage to adjacent properties and facilities. For facilities with animal conflict damage, the objective is to repair the damage caused by animals and where applicable, install deterrents for future animal activities. The repair work consists of, but is not limited to:

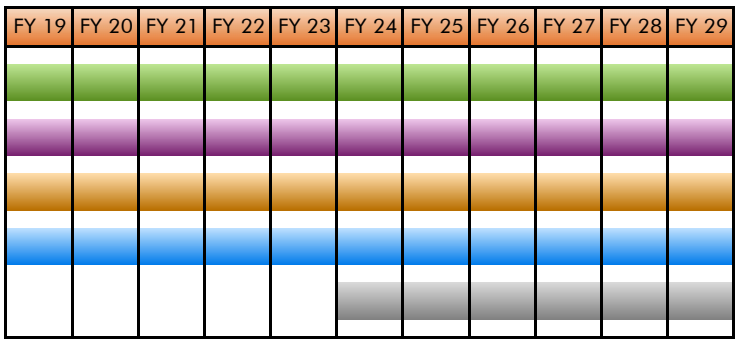
- Excavation and rebuilding of eroded soil material.
- Installation of rodent barriers such as mesh or fabric.
- Repairing the banks with methods commensurate with the extents of damage and environmental constraints.
- Geomorphic channel restoration with bed and bank repair.
- Outfall restoration and repair.
- Sediment removal and blockage repair.
- Fish ladder modifications and repairs.

PROJECT LOCATION

SCHEDULE & STATUS

Several small projects go through the design and construction phases each year under the SMP-2 permit.

Phase	Cost
Plan	4,212
Permits	6,156
Design	18,205
Construct	109,746
Closeout	720
	146,350



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY18	FY19	FY20	FY21	FY22	FY23	FY24	Future	
62084001-Watersheds Asset Rehabilitation Program	9,496	14,959	11,375	11,050	8,100	8,100	8,100	75,170	146,350
with inflation	9,496	14,959	11,375	11,787	8,950	9,254	9,568	106,186	181,576

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY18	FY19		FY20	FY21	FY22	FY23	FY24	Future	
62084001-Watersheds Asset Rehabilitation Program	14,562	9,893	0	11,375	11,787	8,950	9,254	9,568	106,186	181,576

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Watershed Stream Stewardship Fund	181,576
Other Funding Sources	0
Total	181,576

OPERATING COST IMPACTS

The completion of this project is not anticipated to increase or decrease annual operating costs, as the project does not significantly alter the existing facilities or modes of operation.

USEFUL LIFE: Not Available

Water Resources Stewardship

Water Resources Stewardship Capital Improvements

WATER RESOURCES STEWARDSHIP OVERVIEW

The District plans, designs and constructs various capital projects to meet the Board's Ends Policy E-4, "There is water resources stewardship to protect and enhance watersheds and natural resources and improve the quality of life in Santa Clara County." These projects may fulfill environmental enhancement, mitigation or stewardship goals and priorities.

The District has placed an emphasis on stewardship since 1999 when the Water District's Board of Directors adopted a mission and policies that added a focus on environmental stewardship. In 2001, the California legislature added environmental stewardship to the Water District's purpose. Specifically, the Water District's environmental stewardship activities focus on these three areas:

- Healthy creek and bay ecosystems
- Clean, safe water in creeks and the bay
- Improved quality of life through trails, open space and water resources management

The Water District's stewarship work is extensive. Actions to protect the environment are woven into all we do. Some of the Districts stewardship accomplishments since 2000 are:

- Rehabilitated or restored 90 acres of riparian habitat and 500 acres of tidal wetland habitat
- Provided funding for 92 projects that resulted in 71 miles of public access
- Removed over 15,000 lbs of mercury from the creeks in 2017-2018
- Removed more than 20 fish passage impediments
- In conjunction with the Open Space Authority, acquiring 1,300 acres of land for preservation of California Red Legged Frog and California Tiger Salamander habitat

Environmental Enhancement & Stewardship Projects

Environmental enhancement projects are constructed at the direction of the Board either to meet the Safe, Clean Water and Natural Flood Protection program (SCW) obligations or to meet other Board priorities.

The District's Safe, Clean Water Program, approved by the voters of Santa Clara County in 2012, committed funding for environmental enhancement activities that create or restore tidal or riparian habitat. A selection process will be conducted to allocate the SCW funding to the enhancement opportunities that meet Board-defined characteristics.

Stewardship projects are implemented to promote water quality awareness; reduce pollutants in streams; support additional trails, parks and open space; support creek side recreation; and reduce green house gas. Stewardship projects are implemented at the discretion of the Board when reasonable and appropriate. These projects are often accomplished in partnership with or support of other agencies.

Major Capital Improvements Identified in the CIP

- Watershed Habitat Enhancement Design & Construction
- Stevens Creek Fish Passage Enhancement
- Hale Creek Enhancement Pilot Study
- Almaden Lake Improvements
- Salt Ponds A5-11 Restoration
- SCW Fish Passage Improvements
- Ogier Ponds Separation from Coyote Creek

Mitigation Projects

The District manages many mitigation sites and continues to plan, design, and construct new mitigation sites to fulfill CEQA and regulatory permit requirements for both capital projects and operations activities. Mitigation requirements for capital projects may be incorporated into the project scope or accomplished as a separate project.

Major Capital Improvements Identified in the CIP

- SMP Mitigation, Stream and Watershed Land Preservation

Feasibility Studies

In July 2016 the board provided direction for increased visibility and accelerated delivery of Environmental stewardship projects to meet Board priorities. The District has dedicated additional full-time positions to complete the feasibility studies. These feasibility studies will determine the viability of projects that are of interest to the community.

Major Capital Improvements Identified in the CIP

- Watershed Habitat Enhancements

PRIORITY PROCESS AND FINANCIAL ANALYSIS

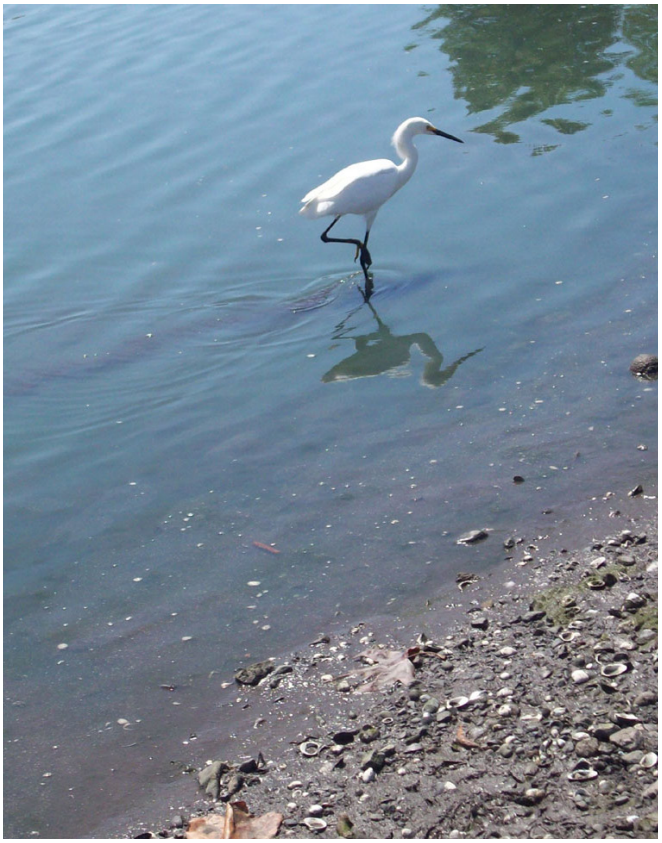
Environmental enhancement and stewardship projects are implemented at the discretion of the Board. Projects may go through a ranking process to compete for Safe, Clean Water funds or the Board may direct that other available revenue be used to implement the proposed projects. The inclusion of these projects in the Fiscal Year 2020-24 CIP has been approved by the Board. The priority criteria used to evaluate these projects are included in Appendix A.

Implementation of Mitigation projects is considered non-discretionary since they are needed to meet California Environmental Quality Act (CEQA) or regulatory permit commitments. Funding for mitigation projects is allocated without a prioritization process.

Financial analysis of the following funding sources for Water Resources Stewardship capital improvements determined that the funding needs for approved projects can be met.

- Watershed and Stream Stewardship Fund
- Safe, Clean Water Fund
- Water Utility Enterprise Fund

It is understood that new capital projects have an impact on future operations and maintenance, and this is included in the financial analysis. Periodically throughout the project, projections of this impact are updated to reflect changes to the project elements.



Water Resources Stewardship Capital Improvements

The following table is a project funding schedule for water resources stewardship capital improvements resulting from this year's financial analysis. Detailed information for each project can be found in this document on the following pages in the order presented in this table. The chart also identifies partially funded projects and estimated unspent appropriation from FY 2018-19.

Water Resources Stewardship Capital Improvements ($K)

Project Number	PROJECT NAME	Through FY18	FY19	FY19 Unspent	FY20	FY21	FY22	FY23	FY24	FY25-34	TOTAL
	ENVIRONMENTAL ENHANCEMENT & STEWARDSHIP										
	Lower Peninsula Watershed										
00294001s	Stevens Creek Fish Passage Enhancement D4.x	850	-	-	-	2,160	6,809	3,642	3,700	2,952	20,113
26164001	Hale Creek Enhancement Pilot Study (D6)	2,251	2,581	3,623	21	-	-	-	-	-	4,853
	Guadalupe Watershed										
26044001	Almaden Lake Improvements (D4.1a)	4,363	191	75	1,153	8,487	8,523	8,779	-	-	31,496
	Coyote Watershed										
00C40400s	Watershed Habitat Enhancement Design & Construction	-	-	-	-	2,184	4,564	4,771	15,418	35,333	62,270
	Multiple Watersheds										
20444001s	Salt Ponds A5-11 Restoration	5,535	95	1,142	-	590	639	1,352	469	3,965	12,645
26044002	SCW Fish Passage Improvements (D4.3; Bolsa, Evelyn, Singleton)	3,888	392	1,308	1,048	-	-	-	-	-	5,328
26C40370	SCW Implementation Fund	-	-	-	-	-	2,127	1,184	218	-	3,529
26044003	Ogier Ponds Separation from Coyote Creek (D4.1b)	-	1,000	500	595	1,603	-	-	-	-	3,198
	ENVIRONMENTAL FEASIBILITY STUDIES										
62044001	Watershed Habitat Enhancement Studies	1,257	1,016	503	20	-	-	-	-	-	2,293
	ENVIRONMENTAL MITGATION										
62184001	SMP Mitigation, Stream and Watershed Land Preservation	16,733	-	840	36	-	-	-	-	-	16,769
	TOTAL	34,877	5,275	7,991	2,873	15,024	22,662	19,728	19,805	42,250	162,494

FY 2018-19 Funds to be reappropriated

The following table shows funding requirements from each funding source for mitigation capital improvements.

Water Resources Stewardship – Funding Sources ($K)

Fund Number	FUND NAME	Through FY18	FY19	FY19 Unspent	FY20	FY21	FY22	FY23	FY24	FY25-34	TOTAL
61	Water Utility Enterprise Fund	3,016	2,581	3,623	21	3,833	6,378	3,578	13,549	23,691	56,647
12	Watershed Stream Stewardship Fund	27,425	1,302	2,293	1,209	9,588	14,157	14,966	6,038	14,594	89,280
26	Safe, Clean Water and Natural Flood Protection Fund	4,436	1,392	2,075	1,643	1,603	2,127	1,184	218	3,965	16,568
	TOTAL	34,877	5,275	7,991	2,873	15,024	22,662	19,728	19,805	42,250	162,494

FY 2018-19 Funds to be reappropriated

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Environmental Enhancement & Stewardship

Lower Peninsula Watershed

Project	**Stevens Creek Fish Passage Enhancements**
Program	Water Resources Stewardship - Environmental Enhancement
Priority No.	72
Project No.	00294001s
District Contact	Ngoc Nguyen nnguyen@valleywater.org

Example of a fish ladder to be modified or reconstructed for better fish passage

PROJECT DESCRIPTION

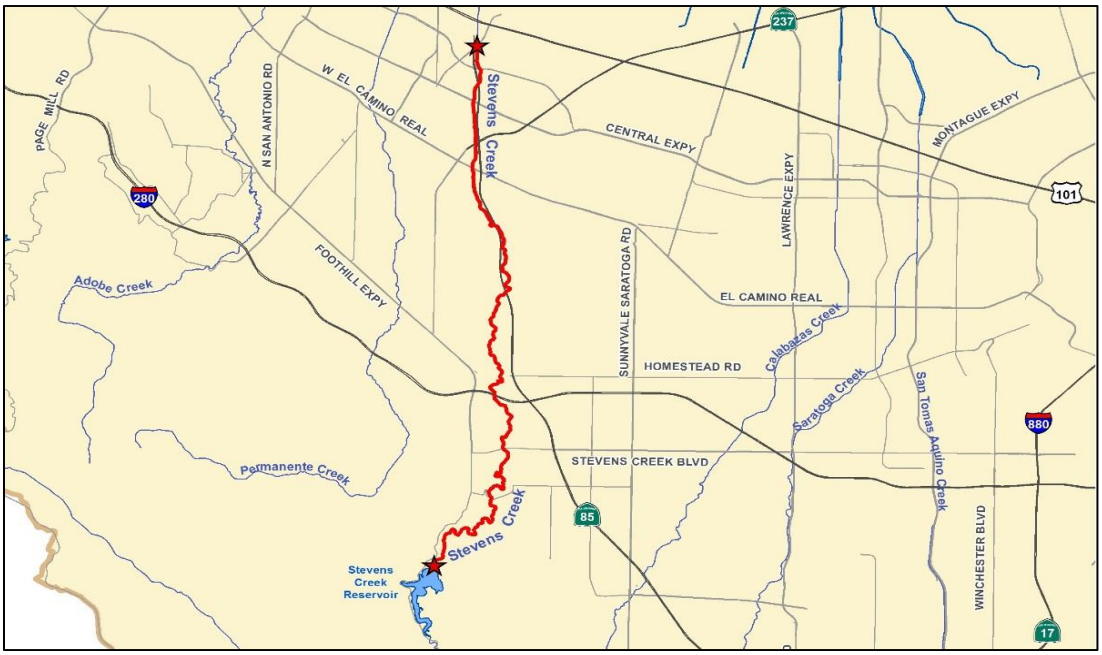
This project plans, designs, and constructs improvements to the Moffett Boulevard fish ladder to improve fish passage as well as a multiport outlet at Stevens Creek Dam to accomplish the following objectives:

- Restore and maintain a healthy steelhead trout population in the Stevens Creek watershed.
- Provide a suitable spawning and rearing habitat below Stevens Creek Dam within a cold water management zone determined on an annual basis through the development of an operations plan.
- Provide adequate passage for adult steelhead trout to reach suitable spawning and rearing habitat and for out-migration of juveniles.

This project is accounted for in the following job numbers:

- 00294001 Fish Passage Planning
- 00C40145 Moffett Boulevard Fish Ladder
- 00C40198 Multi-Port Outlet at Dam
- 62C40403 Stevens Creek Fish Barrier Removal Construction

PROJECT LOCATION



Project Location

SCHEDULE & STATUS

July 2008 to June 2020

Phase	Cost
Plan	850
Permits	122
Design	2,666
Construct	14,112
Closeout	80
	17,830

FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY18	FY19	FY20	FY21	FY22	FY23	FY24	Future	
00294001-FAHCE Stevens Ck Fish Passage Planning	850	0	0	0	0	0	0	0	850
with inflation	850	0	0	0	0	0	0	0	850
00C40145-FAHCE Stevens Ck Fish Ladder at Moffett Blvd	0	0	0	1,305	1,820	0	0	0	3,125
with inflation	0	0	0	1,425	1,989	0	0	0	3,414
00C40198-FAHCE Stevens Ck Dam Multi-Port Outlet	0	0	0	373	1,182	0	0	0	1,555
with inflation	0	0	0	407	1,294	0	0	0	1,701
62C40403-Stevens Ck Fish Barrier Removal Construction	0	0	0	300	3,200	3,200	3,150	2,450	12,300
with inflation	0	0	0	328	3,526	3,642	3,700	2,952	14,147
TOTAL	**850**	**0**	**0**	**1,978**	**6,202**	**3,200**	**3,150**	**2,450**	**17,830**
with inflation	**850**	**0**	**0**	**2,160**	**6,808**	**3,642**	**3,700**	**2,952**	**20,112**

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY18	FY19		FY20	FY21	FY22	FY23	FY24	Future	
00294001-FAHCE Stevens Ck Fish Passage Planning	850	0	0	0	0	0	0	0	0	850
00C40145-FAHCE Stevens Ck Fish Ladder at Moffett Blvd	0	0	0	0	1,425	1,989	0	0	0	3,414
00C40198-FAHCE Stevens Ck Dam Multi-Port Outlet	0	0	0	0	407	1,294	0	0	0	1,701
62C40403-Stevens Ck Fish Barrier Removal Construction	0	0	0	0	328	3,526	3,642	3,700	2,952	14,147
TOTAL	**850**	**0**	**0**	**0**	**2,160**	**6,808**	**3,642**	**3,700**	**2,952**	**20,112**

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Watershed Stream Stewardship Fund–10%	2,011
SCVWD Water Utility Enterprise Fund–90%	18,101
Total	**20,112**

OPERATING COST IMPACTS

Operating costs will be determined during the design phase.

USEFUL LIFE: 50 Years

Project	**Hale Creek Enhancement Pilot Study**
Program	Water Resources Stewardship - Environmental Enhancements
Priority No.	77
Project No.	26164001
District Contact	Ngoc Nguyen NNguyen@valleywater.org

Reach to be modified downstream of 7th Day Adventist foot bridge between Marilyn Drive and North Sunshine Drive

PROJECT DESCRIPTION

This pilot project plans, designs, and constructs improvements to an approximately 500-foot long reach in Hale Creek to accomplish the following objectives:

- Provide flood protection and enhance habitat.
- Restore stream recharge capability to a concrete-lined portion.
- Remove existing concrete channel and replace with a vegetated soft-bottom channel, to improve and restore the natural functions of the stream.

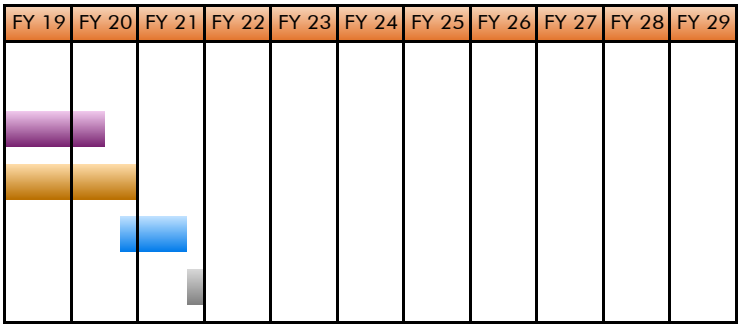
This project meets the commitments of the voter approved Safe, Clean Water Program, Project D6. For a full description of the SCW benefits and KPI's, please visit www.valleywater.org.

PROJECT LOCATION

SCHEDULE & STATUS

July 2014 to June 2021

Phase	Cost
Plan	39
Permits	43
Design	1,124
Construct	3,634
Closeout	10
	4,852



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY18	FY19	FY20	FY21	FY22	FY23	FY24	Future	
26164001-Hale Creek Enhancement Pilot Study	1,014	194	3,644	0	0	0	0	0	4,852
with inflation	1,014	194	3,644	0	0	0	0	0	4,852

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY18	FY19		FY20	FY21	FY22	FY23	FY24	Future	
26164001-Hale Creek Enhancement Pilot Study	2,251	2,580	3,623	21	0	0	0	0	0	4,852

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Safe, Clean Water Fund	4,852
Other Funding Sources	0
Total	4,852

OPERATING COST IMPACTS

Operating cost impacts are anticipated and will be determined during the design phase.

USEFUL LIFE: Not available

Environmental Enhancement & Stewardship

Guadalupe Watershed

Project	**Almaden Lake Improvements**
Program	Water Resources Stewardship – Environmental Enhancement
Priority No.	85
Project No.	26044001
District Contact	Ngoc Nguyen nnguyen@valleywater.org

A southern view of Almaden Lake, through which Alamitos Creek flows

PROJECT DESCRIPTION

The project will separate Alamitos Creek from Almaden Lake and restore Alamitos Creek's stream function within the footprint of Almaden Lake. The goals are to improve water quality and physical habitat for steelhead and other anadromous fish by separating the creek from the lake while incorporating the principle of geomorphic design and to create a self-sustaining channel that requires little maintenance to keep it viable for fisheries and wildlife benefits. Benefits of this project will be the creation of channel complexity in the restored stream channel such as instream riffle-pool habitat, cover for rearing fish, gravel to support spawning and plantings that will provide numerous ancillary wildlife benefits; reduction of high water temperatures released from Almaden Lake into Alamitos Creek; and removal of entrainment, predatory and methylmercury impacts to anadromous fish from Almaden Lake. The objectives are as follows:

- Separate Alamitos Creek from Almaden Lake.
- Reduce thermal impediment to migration of anadromous fish.
- Remove entrainment and impacts from predatory species to anadromous fish.
- Reduce mercury concentration in target fish to meet applicable water quality objectives.
- Minimize impacts to recreational features.

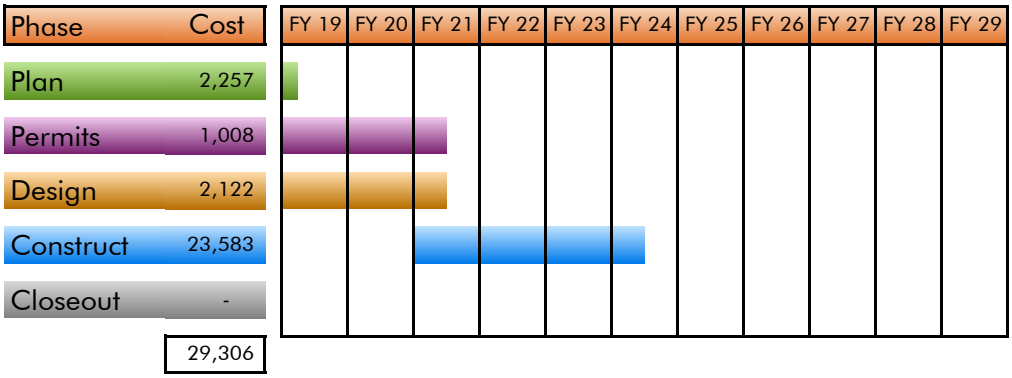
This project is funded for the planning and design phase from the Safe, Clean Water, Priority D4. Funding for construction may also be available from the Safe, Clean Water Program. For a full description of the SCW benefits and KPI's, please visit www.valleywater.org.

PROJECT LOCATION

Project Location
1 Percent Floodplain

SCHEDULE & STATUS

July 2011 to December 2023



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY18	FY19	FY20	FY21	FY22	FY23	FY24	Future	
26044001-Almaden Lake Improvements	3,278	1,201	1,228	7,999	7,800	7,800	0	0	29,306
with inflation	3,278	1,201	1,228	8,487	8,523	8,779	0	0	31,496

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY18	FY19		FY20	FY21	FY22	FY23	FY24	Future	
26044001-Almaden Lake Improvements	4,363	191	75	1,153	8,487	8,523	8,779	0	0	31,496

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Safe,Clean Water Fund	31,496
Other Funding Sources	0
Total	31,496

OPERATING COST IMPACTS

No operating cost impacts are expected from the completion of the planning and design phases of the project.

USEFUL LIFE: 100 Years

Environmental Enhancement & Stewardship

Coyote Watershed

Project	**Watershed Habitat Enhancements Design & Construction**
Program	Water Resources Stewardship
Priority No.	N/A
Project No.	00C40400s
District Contact	Ngoc Nguyen nnguyen@valleywater.org

Aerial view looking downstream of the Ogier Pond complex

PROJECT DESCRIPTION

This project provides for future design and construction of possible habitat enhancements that may occur at Metcalf Ponds along Coyote Creek if feasible projects are identified by the feasibility study currently underway in Project 62044001, and the Board approves proceeding with the work. It also provides funding for possible future construction at Ogier Ponds along Coyote Creek, if the Board approves implementing a project being planned under project 26044003. Funding for this project is contingent on a successful FAHCE settlement. This project accomplishes the following objectives:

- Enhance a healthy steelhead trout and salmon population in the Coyote Creek watershed.

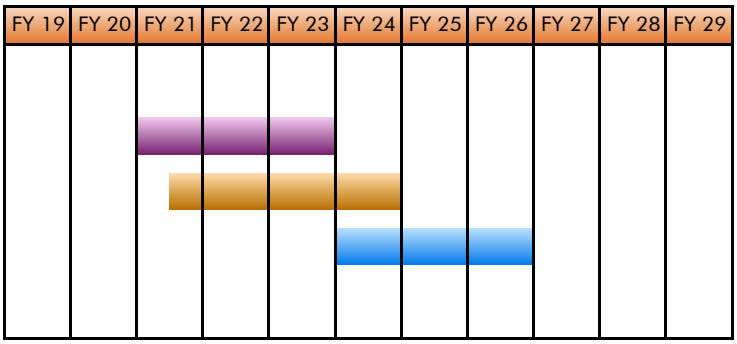
PROJECT LOCATION

★ Project Location

SCHEDULE & STATUS

July 2020 to June 2026

Phase	Cost
Plan	-
Permits	2,000
Design	11,000
Construct	39,000
Closeout	-
	52,000



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**Future**	
95C40400 Metcalf Ponds Design & Construction	0	0	0	2,000	2,000	2,000	10,000	10,000	26,000
with inflation	0	0	0	2,184	2,282	2,385	11,680	12,049	30,580
00C40401s Ogier Ponds Design & Construction	0	0	0	0	2,000	2,000	3,000	19,000	26,000
with inflation	0	0	0	0	2,282	2,385	3,739	23,284	31,690
TOTAL	**0**	**0**	**0**	**2,000**	**4,000**	**4,000**	**13,000**	**29,000**	**52,000**
with inflation	**0**	**0**	**0**	**2,184**	**4,565**	**4,770**	**15,418**	**35,333**	**62,270**

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	**FY18**	**FY19**		**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**Future**	
95C40400 Metcalf Ponds Design & Construction	0	0	0	0	2,184	2,282	2,385	11,680	12,049	30,580
00C40401s Ogier Ponds Design & Construction	0	0	0	0	0	2,282	2,385	3,739	23,284	31,690
TOTAL	**0**	**0**	**0**	**0**	**2,184**	**4,565**	**4,770**	**15,418**	**35,333**	**62,270**

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	30,580
SCVWD Watershed and Stream Stewardship Fund	15,845
SCVWD Safe, Clean Water Fund	0
Total	**62,270**

OPERATING COST IMPACTS

The completion of this project is anticipated to increase operating costs for routine maintenance of the channel. The amount of the increase will be developed in the design phase, when adequate information on the staff-recommended alternative is available.

USEFUL LIFE: 50 years

Environmental Enhancement & Stewardship

Multiple Watersheds

Project	**Salt Ponds A5-11 Restoration**
Program	Water Resources Stewardship - Environmental Enhancements
Priority No.	50
Project No.	20444001s
District Contact	Vincent Gin vgin@valleywater.org

View of one of the former salt evaporation facilities near Alviso

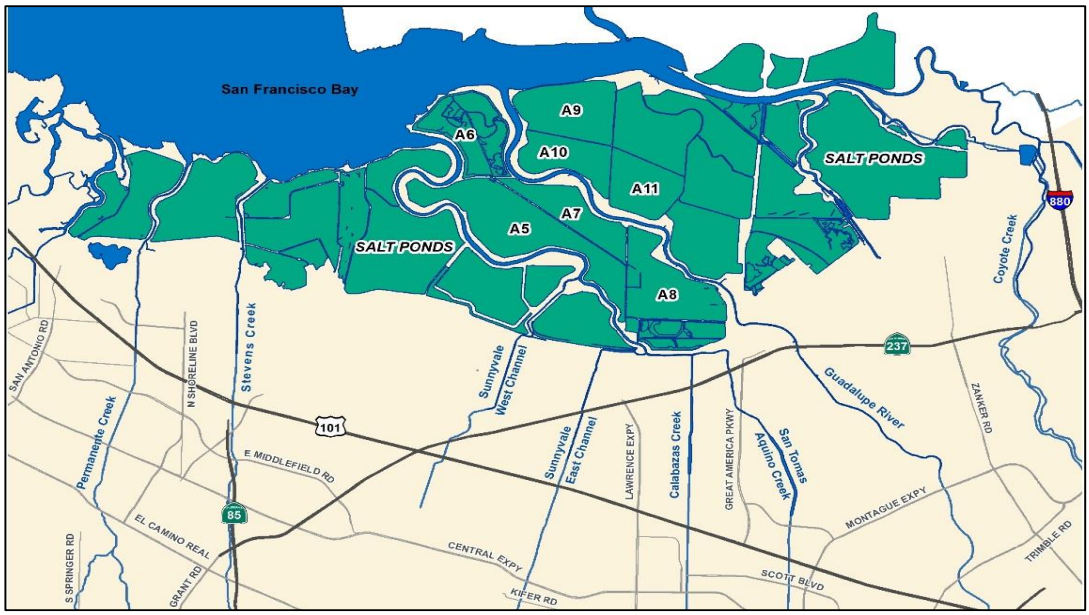
PROJECT DESCRIPTION

This project plans, designs, and constructs improvements to the South Bay Salt Ponds to accomplish the following objectives:

- Realign Calabazas and San Tomas Creeks to flow directly into Pond A8.
- Meet permiting requirements for the creek's realignment or further restoration efforts.
- Fully open the Pond A8 Notch to increase tidal flow into the pond.
- Restoration of Ponds A5 through A11 of the Alviso Complex.
- Improve or construct roads at new placement sites.
- Restore the South Bay Salt Ponds to improve wildlife habitat and protect residents from tidal flooding.

This project meets the commitments of the voter approved Safe, Clean Water Program, Project D8. For a full description of the SCW benefits and KPI's, please visit www.valleywater.org.

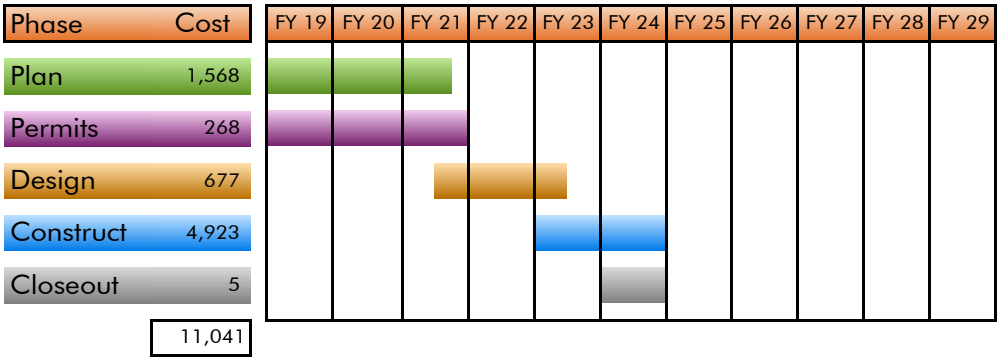
PROJECT LOCATION



Project Location

SCHEDULE & STATUS

July 2013 to June 2024



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**Future**	
20444001 - Salt Ponds A5-11 Restoration	3,685	522	541	540	560	1,190	390	0	7,428
with inflation	3,685	522	541	590	639	1,352	469	0	7,797
26444003 - South Salt Ponds Restoration	269	12	13	11	12	12	12	3,272	3,613
with inflation	269	12	13	12	14	14	15	3,966	4,315
TOTAL	**3,954**	**534**	**554**	**551**	**572**	**1,202**	**402**	**3,272**	**11,041**
with inflation	**3,954**	**534**	**554**	**602**	**653**	**1,366**	**484**	**3,966**	**12,112**

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	**FY18**	**FY19**		**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**Future**	
20444001 - Salt Ponds A5-11 Restoration	4,987	95	875	0	590	639	1,352	469	0	8,131
26444003 - South Salt Ponds Restoration	548	0	267	0	0	0	0	0	3,966	4,514
TOTAL	**4,987**	**95**	**1,142**	**0**	**590**	**639**	**1,352**	**469**	**3,966**	**12,645**

Adjusted Budget includes adopted budget plus approved budget adjustments. Funding exceeds planned expenditures by approximately $532,000. Excess funding will be returned to reserves upon the end of the project.

FUNDING SOURCES

(in thousands $)

SCVWD Watershed and Stream Stewardship Fund	8,131
SCVWD Safe, Clean Water Fund	4,514
Other Funding Sources	0
Total	**12,645**

OPERATING COST IMPACTS

The completion of this project is anticipated to decrease operating costs by approximately $4 million every three years, beginning in FY 2024, by reducing on-going sediment removal.

USEFUL LIFE: Not Available

Project	**SCW Fish Passage Improvements** (D4.3)
Program	Water Resources Stewardship - Environmental Enhancements
Priority No.	80
Project No.	26044002
District Contact	Ngoc Nguyen NNguyen@valleywater.org

Removal of the Bolsa Road fish barrier will allow fish to travel upstream

PROJECT DESCRIPTION

This project plans, designs and constructs improvements for two high priority fish barriers in Santa Clara County. A third priority barrier, owned by the City of San Jose, will be remediated through a project partnership with funds allocated from this project. The project will accomplish the following objectives:

- Planning, design and construction for a passage impediment at the Evelyn Bridge preventing upstream/downstream movement of steelhead in the Stevens Creek watershed. Remediation of this barrier will facilitate movement to 8.8 miles of higher quality upstream habitat and allow for out-migrant fish to access San Francisco Bay unimpeded. (Completed in 2016)
- Planning, design and construction for a passage impediment at the Bolsa Road railroad bridge in the Uvas Watershed. Remediation of this site will allow access to approximately 22 miles of higher quality habitat upstream as well as unimpeded access for out-migrant fish through the project site. Plans and specifications of a riffle pool system extending approximately 1,700 feet downstream of the Union Pacific Railroad bridge have been prepared at the 90% level, with permit applications submitted to resource agencies including California Department of Fish and Wildlife, Regional Water Quality Control Board, and US Corp of Engineers.
- Prepare a partnership agreement and provide technical support to the City of San Jose for removal of the Singleton Road Bridge in Coyote Creek. Removal of this passage impediment will facilitate movement of migratory fish for approximately 17.6 miles creek above the site and allow for unimpeded access of out-migrant fish through the site.An interim crossing to replace/remove existing twin pipe culverts is being evaluated, meanwhile the City of San Jose seeks funding sources for the permanent bridge solution. Alternatives of this interim crossing under considerations include precast bridge slabs/girders, precast concrete arch, steel plate arch and salvaged railroad flatcar. Key criteria for the selected alternative will be the feasibility of completing construction by November 2019.

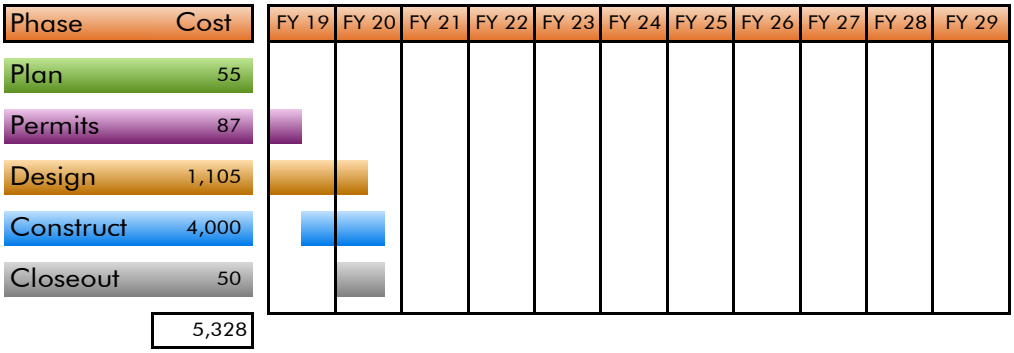
This project meets the commitments of the voter approved Safe, Clean Water Program, Project D4. For a full description of the SCW benefits and KPI's, please visit www.valleywater.org.

PROJECT LOCATION

★ Project Location

SCHEDULE & STATUS

July 2015 to March 2019



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY18	FY19	FY20	FY21	FY22	FY23	FY24	Future	
26044002-SCW Fish Passage Improvements (D4.3; Bolsa, Evelyn, Singleton)	1,755	1,217	2,356	0	0	0	0	0	5,328
with inflation	1,755	1,217	2,356	0	0	0	0	0	5,328

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY18	FY19		FY20	FY21	FY22	FY23	FY24	Future	
26044002-SCW Fish Passage Improvements (D4.3; Bolsa, Evelyn, Singleton)	3,888	392	1,308	1,048	0	0	0	0	0	5,328

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Safe, Clean Water Fund	5,328
Other Funding Sources	0
Total	**5,328**

OPERATING COST IMPACTS

Operating cost impacts are anticipated and will be determined during the planning phase.

USEFUL LIFE: 50 Years

Project	**SCW Implementation Fund**
Program	Water Resources Stewardship
Priority No.	75
Project No.	26C40370
District Contact	Ngoc Nguyen NNguyen@valleywater.org

One possible site: Almaden Lake, as shown here upstream from the Guadalupe Creek confluence

PROJECT DESCRIPTION

This project is a placeholder for future capital projects that have not been fully defined. These projects will implement Safe Clean Water (SCW) objectives for Priority D like construction of Almaden Lake Improvements. Funds will be moved from this placeholder into projects once they have been defined and vetted to ensure they meet the following program objectives:

- Create favorable stream conditions to restore and maintain fisheries.
- Increase the stability of stream channels through construction based on geomorphic principles.

PROJECT LOCATION

No map is provided for this project

SCHEDULE & STATUS

July 2018 to June 2032

Data shown here is based on preliminary information. Specific projects identified to move forward will require further refinement. A Phase schedule will be defined in the planning phase.

Phase	Cost
Plan	-
Design	-
Construct	3,529
Closeout	-
	3,529

FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY18	FY19	FY20	FY21	FY22	FY23	FY24	Future	
26C40370-SCW Implementation Fund	0	0	0	0	2,127	1,184	218	0	3,529
with inflation	0	0	0	0	2,127	1,184	218	0	3,529

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY18	FY19		FY20	FY21	FY22	FY23	FY24	Future	
26C40370-SCW Implementation Fund	0	0	0	0	0	2,127	1,184	218	0	3,529

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Safe, Clean Water Fund	3,529
Total	3,529

OPERATING COST IMPACTS

Not Available

USEFUL LIFE: Not Available

Project	**SCW Ogier Ponds Separation from Coyote Creek (Planning & Design)**
Program	Water Resources Stewardship
Priority No.	74
Project No.	26044003
District Contact	Vincent Gin VGin@valleywater.org

Ogier Pond complex looking downstream. Coyote Creek enters in lower right. The pond is bordered by Coyote Creek Trail on the right, and a cherry orchard on the left.

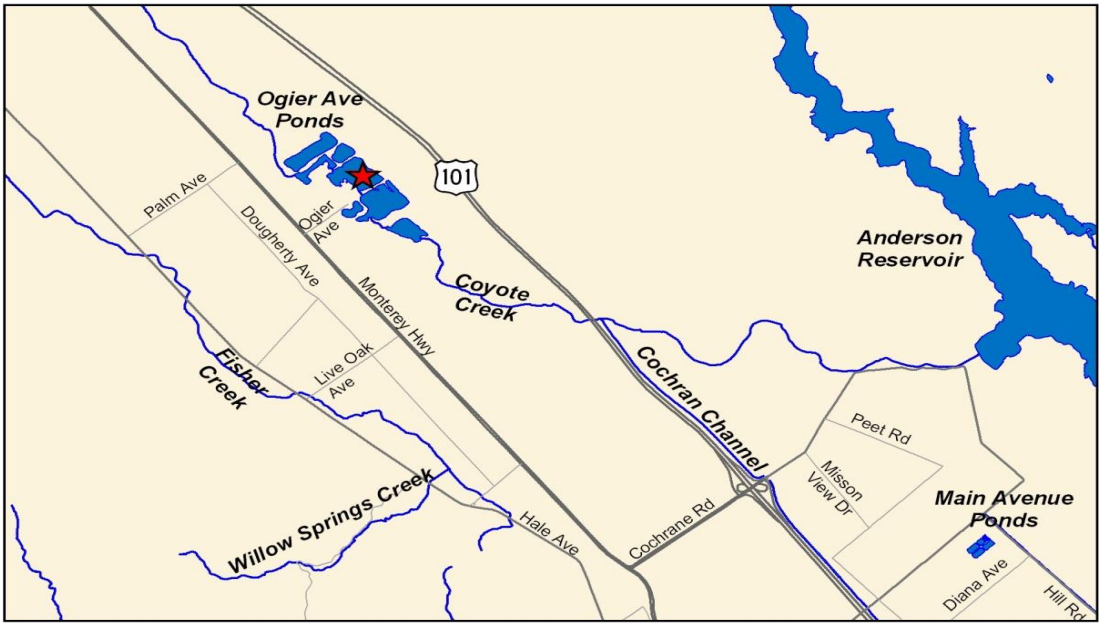
PROJECT DESCRIPTION

This project plans and designs possible improvements to separate Ogier Ponds from Coyote Creek where they meet, approximately 3,800 feet upstream of Ogier Avenue in San Jose, to meet the following objectives:

- Meet regulatory requirements for implementation of the Dam Maintenance Program so the District can continue to maintain adequate water supply for Santa Clara Valley residents.
- Eliminate the temperature and predation traps and improve passage for Chinook salmon and steelhead.
- Preserve the existing open water habitat.
- Minimize impacts to the future recreational uses being planned by Santa Clara County.

This project was approved by the voters in the Safe, Clean Water Program as Project D4 (planning & design phase). For a full description of the SCW benefits and KPI's, please visit www.valleywater.org/SCW.

PROJECT LOCATION



★ Project Location

SCHEDULE & STATUS

October 2018 through June 2020

Phase	Cost
Plan	3,063
Design	-
Construct	-
Closeout	-
	3,063

FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY18	FY19	FY20	FY21	FY22	FY23	FY24	Future	
26044003-SCW Ogier Ponds Separation from Coyote Creek (Planning & Design)	0	500	1,095	1,468	0	0	0	0	3,063
with inflation	0	500	1,095	1,603	0	0	0	0	3,198

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY18	FY19		FY20	FY21	FY22	FY23	FY24	Future	
26044003-SCW Ogier Ponds Separation from Coyote Creek (Planning & Design)	0	1,000	500	595	1,603	0	0	0	0	3,198

Adjusted Budget includes adopted budget plus approved budget adjustments

FUNDING SOURCES

(in thousands $)

SCVWD Safe, Clean Water Fund	3,198
Other Funding Sources	0
Total	3,198

OPERATING COST IMPACTS

Not available. This project includes only the planning and design phases.

USEFUL LIFE: Not Available

Feasibility Studies

Project	**Watershed Habitat Enhancements**
Program	Water Resources Stewardship
Priority No.	N/A
Project No.	62044001
District Contact	Ngoc Nguyen nnguyen@valleywater.org

Aerial view looking downstream of the Ogier Pond complex

PROJECT DESCRIPTION

This project provides for feasibility studies of possible habitat enhancements at the Ogier Ponds and Metcalf Ponds along Coyote Creek and an evaluation and determination of priority for addressing various fish passage barriers along Stevens Creek. This project accomplishes the following objectives:

- Enhance a healthy steelhead trout and salmon population in the Coyote Creek watershed.
- Provide adequate passage for adult steelhead trout to reach suitable spawning and rearing habitat and for out-migration of juveniles along Stevens Creek.

PROJECT LOCATION

Project Location

SCHEDULE & STATUS

April 2017 to June 2020

Phase	Cost
Plan	1,727
Permits	-
Design	15
Construct	-
Closeout	-
	2,293

FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY18	FY19	FY20	FY21	FY22	FY23	FY24	Future	
62044001-Watershed Habitat Enhancements	1,243	527	523	0	0	0	0	0	2,293
with inflation	1,243	527	523	0	0	0	0	0	2,293

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY18	FY19		FY20	FY21	FY22	FY23	FY24	Future	
62044001-Watershed Habitat Enhancements	1,257	1,016	503	20	0	0	0	0	0	2,293

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Watershed & Stream Stewardship Fund	2,293
Other Funding Sources	0
Total	2,293

OPERATING COST IMPACTS

No operating impacts are anticipated from this project because this is a feasibility study.

USEFUL LIFE: N/A

Mitigation

Project	**SMP Mitigation Stream and Watershed Land Preservation**
Program	Water Resources Stewardship – Mitigation
Priority No.	99
Project No.	62184001
District Contact	Vincent Gin vgin@valleywater.org

Creek-side settings such as this will be used for stream and watershed land preservation

PROJECT DESCRIPTION

This project preserves streams and watershed lands in Santa Clara County and implements appropriate restorations in these lands to accomplish the following objectives:

- Provide Stream Maintenance Program (SMP) mitigation credits through preservation of streams and watershed lands to provide long-term protection of unique and valuable local stream resources and watersheds, in a largely self-sustaining setting. Approximately 108 acres of the total land preservation will be for protection of riparian and upland habitats that are known to support California red-legged frogs.
- Seek opportunities to partner with other organizations to accomplish the project objectives.

PROJECT LOCATION

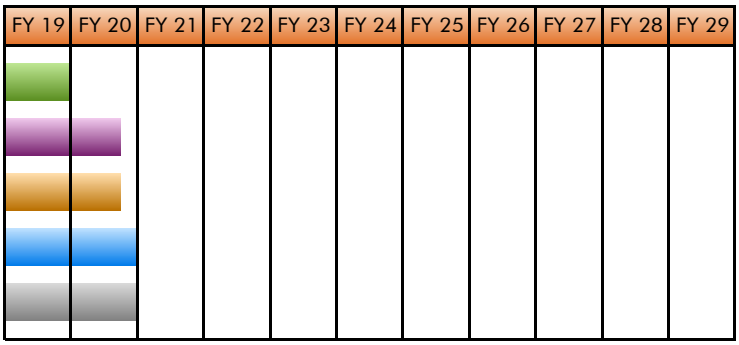
The project will purchase multiple sites for preservation in Santa Clara Basin as they become available.
No map is provided.

SCHEDULE & STATUS

July 2004 to June 2020

Some environmental tasks in the planning phase continue thru construction. Land acquisition is shown in the design phase, with restoration of site habitat shown in the construction phase.

Phase	Cost
Plan	1,928
Permits	1,543
Design	9,990
Construct	838
Closeout	100
	16,769



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY18	FY19	FY20	FY21	FY22	FY23	FY24	Future	
62184001-SMP Mitigation Stream and Watershed Land Preservation	15,093	800	876	0	0	0	0	0	16,769
with inflation	15,093	800	876	0	0	0	0	0	16,769

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY18	FY19		FY20	FY21	FY22	FY23	FY24	Future	
62184001-SMP Mitigation Stream and Watershed Land Preservation	16,733	0	840	36	0	0	0	0	0	16,769

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Watershed Stream Stewardship Fund	16,769
Other Funding Source	0
Total	**16,769**

OPERATING COST IMPACTS

Operating cost will vary, depending on the type of acquisition ownership and requirements for maintenance of each site. Routine long-term management costs of acquired properties are budgeted in project # 62181005.

USEFUL LIFE: 50+ Years

Buildings and Grounds

Building and Grounds Capital Improvements

BUILDINGS AND GROUNDS OVERVIEW

The District's Almaden-Winfield campus occupies nearly 50 acres along Almaden Expressway in the City of San Jose. The District manages the campus to ensure a healthful and safe work environment for employees and visitors. The campus includes 10 buildings, multiple parking lots, a corporation yard, landscaping, and other appurtenances.

With most of the buildings on campus over 30 years old, the rehabilitation needs have steadily increased in recent years. The District administers an asset management program for its buildings and grounds infrastructure that includes a schedule for maintenance and rehabilitation to ensure that each facility functions as intended over its useful life.

Major Capital Improvements Identified in the CIP

- Facility Management, Small Capital Improvements
- Headquarters Operations Building

PRIORITY PROCESS AND FINANCIAL ANALYSIS

The fiscal year 2019-23 priority criteria for evaluating new buildings and grounds capital improvements were carried over to fiscal year 2020-24 priority setting process to allow time for further discussions on whether changes to the criteria are needed. The priority criteria used are included in Appendix A.

Financial analysis of the following funding sources for buildings and grounds capital improvements was conducted to determine if there are limitations to funding all the proposed capital projects.

- Watershed and Stream Stewardship Fund
- General Fund
- Water Utility Enterprise Fund

Results of this year's prioritization process and financial analysis are summarized in Appendix B. The process concluded that the Facility Management, Small Capital Improvements will continue to be funded at $2 million per year to meet the higher priority Buildings and Grounds needs. Valley Water's Almaden Campus facilities are at or approaching full capacity. Staff, with the assistance of a consultant, are exploring alternatives to improve the facilities on the Almaden and Winfield campus, upgrade the employee work environment and maintain Valley Water facility assets. The Headquarters Operations Building project is a placeholder to fund design and construction of the improvements approved by the Board.

Building and Grounds Capital Improvements

The following table is a project funding schedule for buildings and grounds capital improvements resulting from this year's priority process and financial analysis. Detailed information for each project can be found in this document on the following pages in the order presented in this table. The chart also identifies partially funded projects and estimated unspent appropriation from FY 2018-19.

Buildings and Grounds Capital Improvements ($K)

Project Number	PROJECT NAME	Through FY18	FY19	FY19 Unspent	FY20	FY21	FY22	FY23	FY24	FY25-34	TOTAL
60204016	Facility Management, Small Capital Improvements	n/a	2,572	-	2,063	2,125	2,190	2,258	2,327	24,455	37,990
60204032	Headquarters Operations Building	0	0	-	-	4,259	6,779	4,770	-	-	15,808
	TOTAL	-	2,572	-	2,063	6,384	8,969	7,028	2,327	24,455	53,798

FY 2018-19 Funds to be reappropriated

The following table shows funding requirements from each funding source for buildings and grounds capital improvements.

Buildings and Grounds – Funding Sources ($K)

Fund Number	FUND NAME	Through FY18	FY19	FY18 Unspent	FY20	FY21	FY22	FY23	FY24	FY25-34	TOTAL
11	General Fund	-	2,572	-	2,063	6,384	8,969	7,028	2,327	24,455	53,798
	TOTAL	-	2,572	-	2,063	6,384	8,969	7,028	2,327	24,455	53,798

FY 2018-19 Funds to be reappropriated

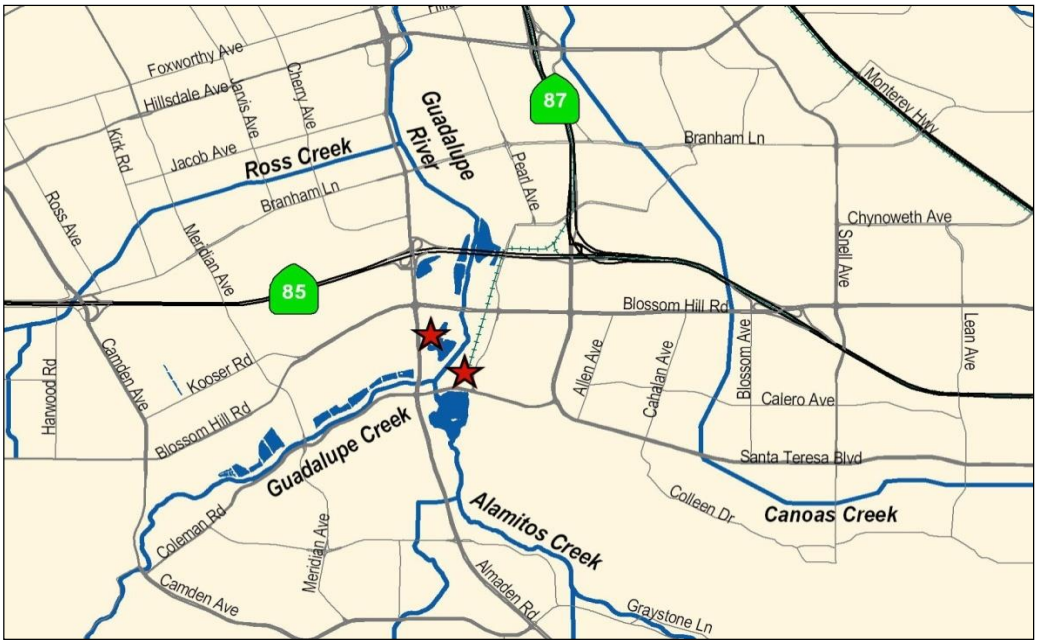
Project	**Facility Management, Small Capital Improvements**
Program	Buildings and Grounds
Priority No.	73
Project No.	60204016
District Contact	Tina Yoke tyoke@valleywater.org

Front view of the Headquarters building at the Almaden Campus

PROJECT DESCRIPTION

This project reserves funding for capital maintenance and replacement of buildings, grounds, and facilities on the Almaden and Winfield campus, to provide a healthy and safe environment for staff and visitors.

PROJECT LOCATION



★ Project Location

SCHEDULE & STATUS

Improvements will be managed on an as-needed basis throughout the year.

Phase	Cost	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29
Plan	n/a											
Design	n/a											
Construct	n/a											
Closeout	n/a											
	n/a											

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY18	FY19	FY20	FY21	FY22	FY23	FY24	Future	
60204016-Facility Management, Small Capital Improvements	n/a	2,500	2,063	2,000	2,000	2,000	2,000	18,000	30,563
with inflation	n/a	2,500	2,063	2,125	2,190	2,258	2,327	24,455	37,918

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY18	FY19		FY20	FY21	FY22	FY23	FY24	Future	
60204016-Facility Management, Small Capital Improvements	n/a	2,572	0	2,063	2,125	2,190	2,258	2,327	24,455	37,990

Adjusted Budget includes adopted budget plus approved budget adjustments. Small Capital Improvement projects do not carry forward unspent funds from one fiscal year to the next. Unspent funds are returned to fund reserves at the close of each fiscal year and new funding is provided in the next fiscal year.

FUNDING SOURCES

(in thousands $)

SCVWD General Fund	37,990
Other Funding Source	0
Total	**37,990**

OPERATING COST IMPACTS

The completion of this project is not anticipated to increase or decrease annual operating costs. The purpose of these maintenance projects is to avoid unnecessary financial impact caused by building shut-down and work stoppage.

USEFUL LIFE: Not Available

Project	**Headquarters Operations Building**
Program	Buildings and Grounds
Priority No.	65
Project No.	60204032
District Contact	Tina Yoke tyoke@valleywater.org

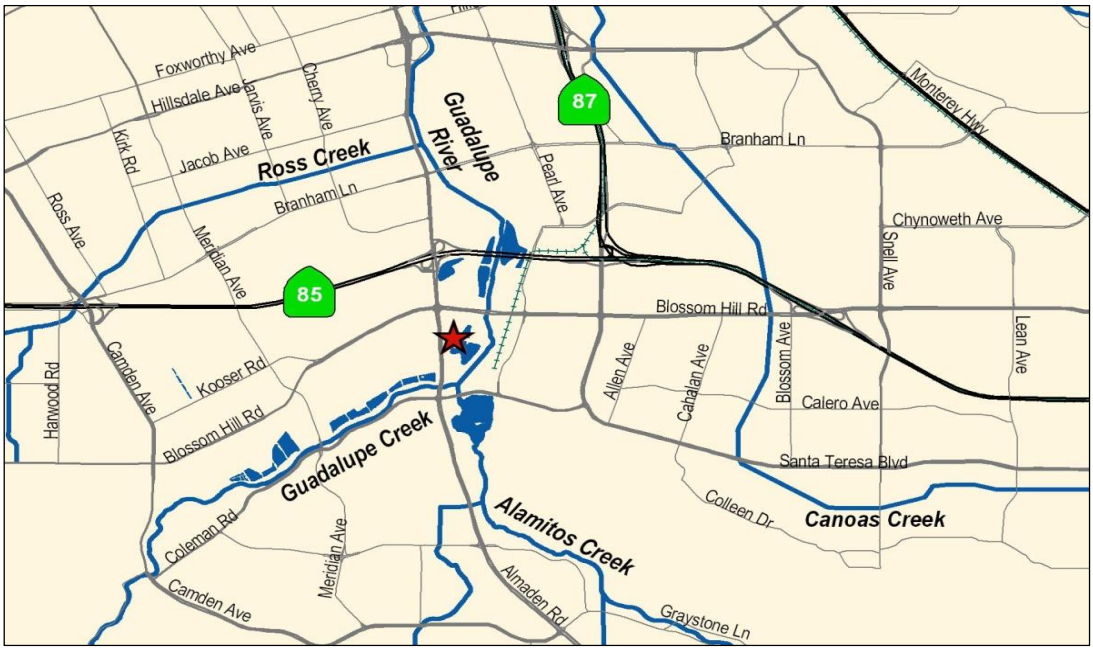
Existing Maintenance Building

PROJECT DESCRIPTION

This project is a placeholder to plan, design, and construct future facilities or improvements to existing facilities. This project accomplishes the following objectives:

- Replace office space in the Maintenance Office Building to provide a safe and healthy work environment.
- Provide adequate and sufficient space to enable the District to efficiently perform its core business.

PROJECT LOCATION

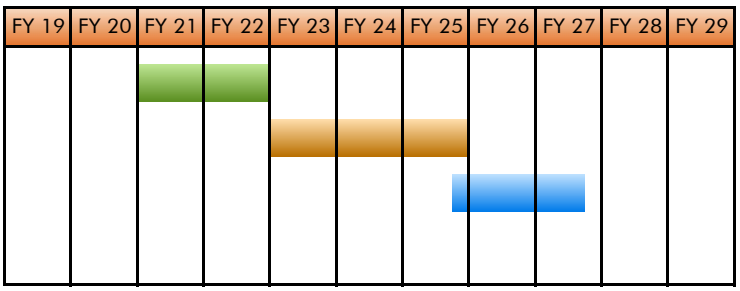


★ Project Location

SCHEDULE & STATUS

July 2014 to January 2027

Phase	Cost
Plan	2,216
Design	1,740
Construct	9,880
Closeout	23
	13,840



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY18	FY19	FY20	FY21	FY22	FY23	FY24	Future	
60204032-Headquarters Operations Building	0	0	0	3,900	5,940	4,000	0	0	13,840
with inflation	0	0	0	4,259	6,779	4,770	0	0	15,807

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	FY18	FY19		FY20	FY21	FY22	FY23	FY24	Future	
60204032-Headquarters Operations Building	0	0	0	0	4,259	6,779	4,770	0	0	15,807

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD General Fund	15,807
Other Funding Sources	0
Total	15,807

OPERATING COST IMPACTS

Operating costs will be determined during the design phase.

USEFUL LIFE: Not Available

Information Technology

Information Technology Capital Improvements

INFORMATION TECHNOLOGY OVERVIEW

The District relies on its software systems and technology infrastructure to help manage its core responsibilities of water supply, flood protection, and environmental stewardship. Recognizing the importance of Information Technology to its success, the District completed the Information Systems Master Plan (ISMP) in 2012. The ISMP is an 8-year plan consisting of 32 capital and non-capital improvement projects.

In 2014, the Information Technology Capital Fund was created. It accounts for the costs to acquire, and install capital information technology projects with District-wide benefit. Projects include acquisition and replacement of computers, networks, and communications systems as well as major investments in enterprise software systems.

Costs are billed to user departments as Intra-District Computer Equipment Charges. Billing rates will be set to smooth charges over time by recovering current costs and accumulating reserves for major planned future projects. Current year charges or a combination of current year charges and reserves may be used to fund authorized projects. The purpose of this fund is to provide adequate resources while avoiding peaks and valleys in charges to user departments.

Major Capital Improvements Identified in the CIP

- Data Consolidation
- E-Discovery Management System
- Information Technology Disaster Recovery
- ERP System Implementation
- Telephone System Voiceover IP
- Software Upgrades & Enhancements
- Capital Construction Management System
- WTP-WQL Network Equipment

PRIORITY PROCESS AND FINANCIAL ANALYSIS

The fiscal year 2019-23 priority criteria for evaluating new Information Technology projects were carried over to the fiscal year 2020-24 priority setting process to allow time for further discussions on whether changes to the criteria are needed. The priority criteria used are included in Appendix A.

Financial analysis of the Information Technology Capital Fund was conducted to determine if there are limitations to funding the planned capital projects. Results of this year's prioritization process and financial analysis are summarized in Appendix B. Funding needs for approved Information Technology projects can be met.

Information Technology Capital Improvements

The following table is a project funding schedule for information technology capital improvements resulting from this year's priority process and financial analysis. Detailed information for each project can be found in this document on the following pages in the order presented in this table. The chart also identifies partially funded projects and estimated unspent appropriation from FY 2018-19.

Information Technology Capital Improvements ($K)

Project Number	PROJECT NAME	Through FY18	FY19	FY19 Unspent	FY20	FY21	FY22	FY23	FY24	FY25-34	TOTAL
73274009	Data Consolidation	940	83	883	59	77	80	-	-	-	1,239
73274001	IT Disaster Recovery	2,396	-	2,133	-	99	-	-	-	-	2,495
60274062s	ERP System Implementation	12,147	3,660	7,180	-	2,863	-	-	-	-	18,670
73274008	Software Upgrades & Enhancements	1,844	559	-	781	906	411	2,256	1,423	9,394	17,574
73274012	Telephone System Voiceover IP	-	-	-	1,116	136	-	-	-	-	1,252
73274011	E-Discovery Management System	545	-	24	-	-	-	-	-	-	545
95074039	Capital Construction Mgmt System	-	-	-	1,084	-	-	-	-	-	1,084
95274003	WTP-WQL Network Equipment	2,221	502	-	184	-	97	1,519	3,061	4,767	12,351
	TOTAL	20,093	4,804	10,220	3,224	4,081	588	3,775	4,484	14,161	55,210

FY 2018-19 Funds to be reappropriated

The following table shows funding requirements from each funding source for information technology capital improvements.

Information Technology – Funding Sources ($K)

Fund Number	FUND NAME	Through FY18	FY19	FY19 Unspent	FY20	FY21	FY22	FY23	FY24	FY25-34	TOTAL
61	Water Utility Enterprise Fund	2,221	502	-	1,268	-	97	1,519	3,061	4,767	13,435
11	General Fund	1,199	-	-	-	-	-	-	-	-	1,199
73	Information Technology Fund	16,673	4,302	10,220	1,956	4,081	491	2,256	1,423	9,394	40,576
	TOTAL	20,093	4,804	10,220	3,224	4,081	588	3,775	4,484	14,161	55,210

FY 2018-19 Funds to be reappropriated

Project	**Data Consolidation**
Program	Information Technology
Priority No.	34
Project No.	73274009
District Contact	Phuong Trieu phuong@valleywater.org

No Photo is provided for this project.

PROJECT DESCRIPTION

This project plans, designs, and implements improvements to Data Consolidation to accomplish the following objectives:

- Implement an Enterprise Content Management system with strong Business Intelligence.
- Move from an applications-centric model to a data-centric model, thereby removing silos of data stores.
- Information management for big data. Manage data as a strategic, core asset, with ongoing process and management control for big data analytics.
- High-Performance analytics for big data. Gain rapid insights from big data and the ability to solve increasingly complex business problems.
- Reduce the overall data footprint.

PROJECT LOCATION

No Map is provided for this project

SCHEDULE & STATUS

July 2015 to June 2022

Phase	Cost
Plan	-
Design	-
Construct	1,159
Closeout	-
	1,228

FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY18	FY19	FY20	FY21	FY22	FY23	FY24	Future	
73274009-Data Consolidation	90	50	942	73	73	0	0	0	1,228
with inflation	90	50	942	77	80	0	0	0	1,239

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY18	FY19		FY20	FY21	FY22	FY23	FY24	Future	
73274009-Data Consolidation	940	83	883	59	77	80	0	0	0	1,239

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Information Technology Fund	1,239
Other Funding Sources	0
Total	**1,239**

OPERATING COST IMPACTS

Ongoing annual costs will need to be determined and be based on implemented solutions.

USEFUL LIFE: Not Available

Project	**Information Technology Disaster Recovery**
Program	Information Technology
Priority No.	46
Project No.	73274001
District Contact	Michael Cook MCook@valleywater.org

Existing Data Center that houses critical servers supporting the District's normal operations

PROJECT DESCRIPTION

This project plans and designs improvements to Information Technology to accomplish the following objectives:

- Enable coordinated, rapid recovery from a disaster.
- Reduce the District's business risk exposure.

PROJECT LOCATION

No Map is provided for this project

SCHEDULE & STATUS

July 2014 to June 2021

Phase	Cost
Plan	14
Design	12
Construct	2,287
Closeout	-
	2,427

FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY18	FY19	FY20	FY21	FY22	FY23	FY24	Future	
73274001-Information Technology Disaster Recovery	163	100	1,048	1,116	0	0	0	0	2,427
with inflation	163	100	1,048	1,184	0	0	0	0	2,495

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY18	FY19		FY20	FY21	FY22	FY23	FY24	Future	
73274001-Information Technology Disaster Recovery	2,396	0	2,133	0	99	0	0	0	0	2,495

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

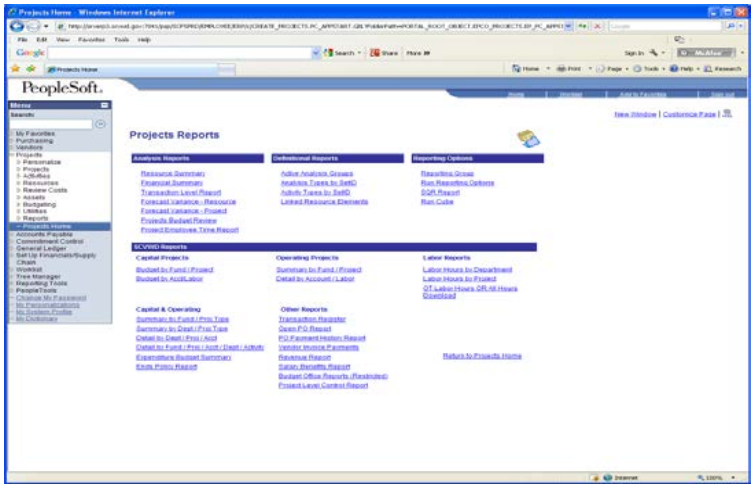
SCVWD Information Technology Fund	2,495
Other Funding Sources	0
Total	2,495

OPERATING COST IMPACTS

Ongoing annual costs will need to be determined and be based on implemented solutions.

USEFUL LIFE: Not Available

Project	**PeopleSoft System Upgrade and ERP System Implementation**
Program	Information Technology
Priority No.	63
Project No.	73274002
District Contact	Phuong Trieu PTrieu@valleywater.org



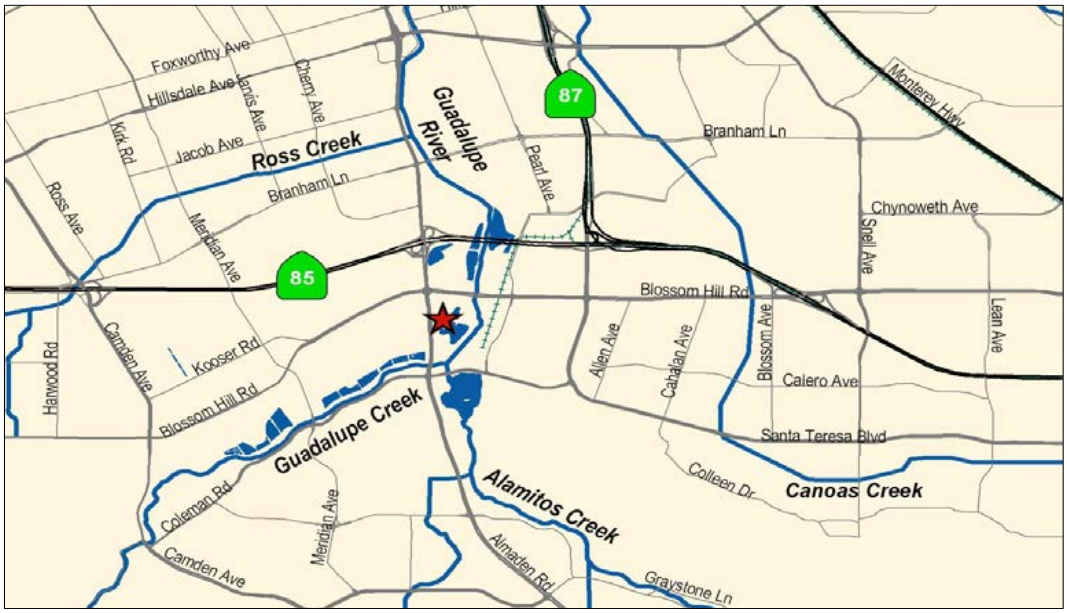
PeopleSoft Reports page from the District's intranet

PROJECT DESCRIPTION

This project selects and implements a new cloud-based, integrated, proven and state-of-the-art ERP system to replace the current out-of-date ERP (PeopleSoft) application. Below are the objectives:

- Provide up-to-date functionalities for Finance, HR, Payroll, Contract, Procurement, Inventory, and Warehouse areas, and to reengineer business processes to ensure that the District takes full advantage of the software's inherent capabilities.
- Increase productivity by eliminating redundancy and manual processes for work-arounds for current PeopleSoft system.
- Increase operational effectiveness, reduce costs and improve management decision-making processes by increasing the ability to access and analyze data.
- Ensure system security complies with industry standards.
- Minimize reliance on District's IT resources for enhancements, support, and maintenance.

PROJECT LOCATION

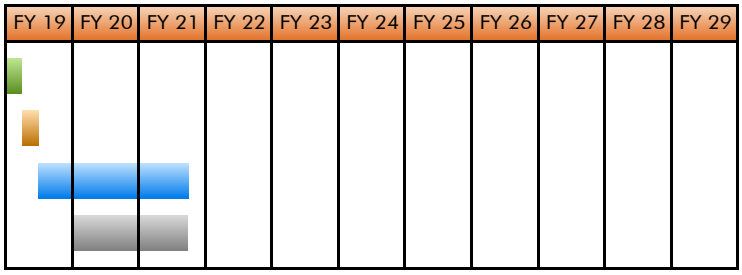


★ Project Location

SCHEDULE & STATUS

July 2013 to March 2021

Phase	Cost
Plan	-
Design	-
Construct	16,513
Closeout	100
	18,303



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY18	FY19	FY20	FY21	FY22	FY23	FY24	Future	
60274062-PeopleSoft System Upgrade and ERP System Implementation	1,199	0	0	0	0	0	0	0	1,199
with inflation	1,199	0	0	0	0	0	0	0	1,199
73274002-PeopleSoft System Upgrade and ERP System Implementation	3,128	4,300	4,876	4,800	0	0	0	0	17,104
with inflation	3,128	4,300	4,876	5,167	0	0	0	0	17,471
TOTAL	4,327	4,300	4,876	4,800	0	0	0	0	18,303
with inflation	4,327	4,300	4,876	5,167	0	0	0	0	18,670

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY18	FY19		FY20	FY21	FY22	FY23	FY24	Future	
60274062-PeopleSoft System Upgrade and ERP System Implementation	1,199	0	0	0	0	0	0	0	0	1,199
73274002-PeopleSoft System Upgrade and ERP System Implementation	10,948	3,660	7,180	0	2,863	0	0	0	0	17,471
TOTAL	12,147	3,660	7,180	0	2,863	0	0	0	0	18,670

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD General Fund	1,199
SCVWD Information Technology Fund	17,471
Total	18,670

OPERATING COST IMPACTS

Upon completion of this project, one full-time employee will be needed for expanded technical support for new system modules and features and to continue with operational refinements, enhancements, integrations, report development, etc. on an on-going annual basis. PeopleSoft software maintenance fees are required on an annual recurring basis and projected to increase by three percent each year. The projected annual software maintenance fee for FY 2019 is $164,324.

USEFUL LIFE: 5 Years

Project	Software Upgrades & Enhancements
Program	Information Technology
Priority No.	54
Project No.	73274008
District Contact	Tina Yoke TYoke@valleywater.org

Existing District systems to be upgraded and enahanced

PROJECT DESCRIPTION

This project provides upgrade and enhancement services to existing District systems, including GIS, Maximo, Oracle Development system, internal and external District websites, and related databases. Previously, software upgrades were budgeted to their individual respective maintenance and support projects. This new project aims to consolidate activities into a single project for better organization, planning and budgeting purposes (the exception is ERP which has its own upgrade project).

The objective of this project is to regularly upgrade existing software packages to:

- Reduce current risks associated with being on a software version that is no longer supported by the vendor and is running on outdated operating systems.
- Increase the level of service provided by the software with new functionalities.

PROJECT LOCATION

No Map is provided for this project

SCHEDULE & STATUS

July 2015 to June 2032

Phase	Cost
Plan	325
Design	221
Construct	12,347
Closeout	-
	13,534

FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY18	FY19	FY20	FY21	FY22	FY23	FY24	Future	
73274008-Software Upgrades & Enhancements	1,285	1,118	781	830	360	1,892	1,142	6,126	13,534
with inflation	1,285	1,118	781	906	411	2,256	1,423	9,393	17,574

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY18	FY19		FY20	FY21	FY22	FY23	FY24	Future	
73274008-Software Upgrades & Enhancements	1,844	559	0	781	906	411	2,256	1,423	9,393	17,574

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Information Technology Fund	17,574
Other Funding Sources	0
Total	17,574

OPERATING COST IMPACTS

The completion of this project is not anticipated to increase or decrease annual operating costs, as the project does not significantly alter the existing facilities or modes of operation.

USEFUL LIFE: Not Available

Project	**Telephone System Voice Over IP**
Program	IT
Priority No.	42
Project No.	73274012
District Contact	Michael Cook MCook@valleywater.org

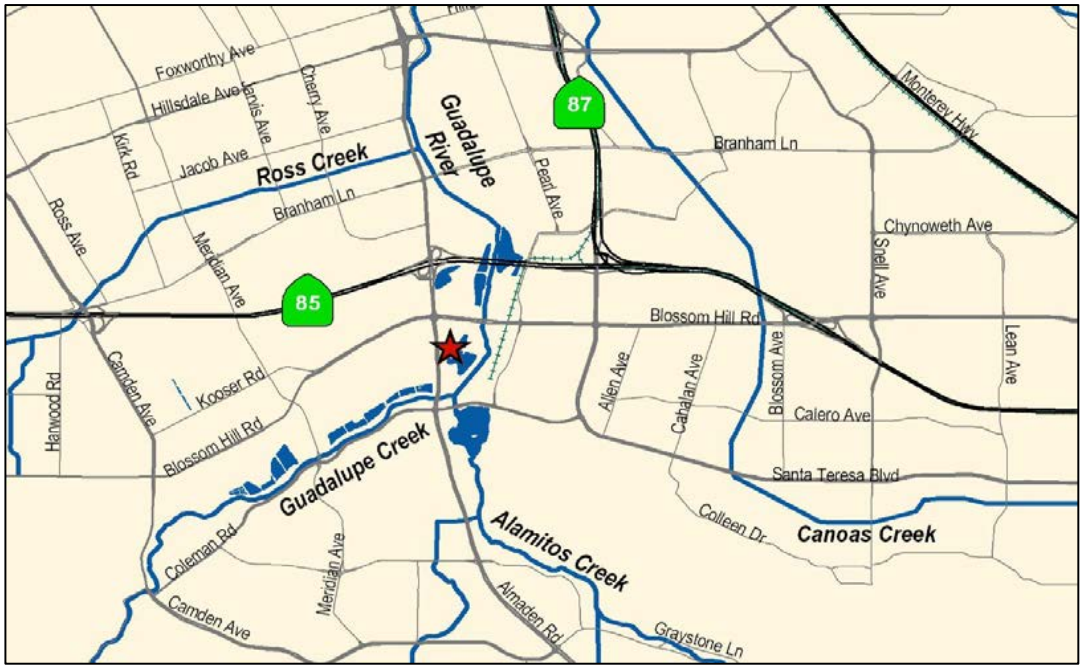
The current Avaya Telephone System was first installed in the Administration Building in 1986.

PROJECT DESCRIPTION

This project plans, designs, and constructs improvements to the District's Telephone system to accomplish the following objectives:

- Replace current Avaya digital phone stations with new Avaya voice over IP (VoIP) telephone stations.

PROJECT LOCATION

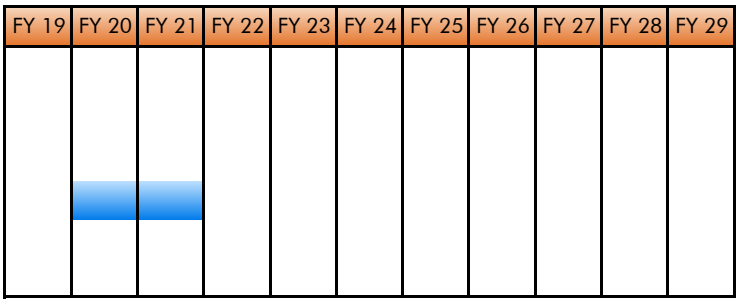


★ Project Location

SCHEDULE & STATUS

July 2019 to June 2021

Phase	Cost
Plan	-
Design	-
Construct	1,244
Closeout	-
	1,244



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY18	FY19	FY20	FY21	FY22	FY23	FY24	Future	
73274012-Telephone System Voice Over IP	0	0	1,116	128	0	0	0	0	1,244
with inflation	0	0	1,116	136	0	0	0	0	1,252

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY18	FY19		FY20	FY21	FY22	FY23	FY24	Future	
73274012-Telephone System Voice Over IP			0	1,116	136	0	0	0	0	1,252

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Information Technology Fund	1,252
Other Funding Sources	0
Total	**1,252**

OPERATING COST IMPACTS

N/A

USEFUL LIFE: N/A

Project	**E-Discovery Management System**
Program	Information Technology
Priority No.	56
Project No.	73274011
District Contact	Michael Cook MCook@valleywater.org

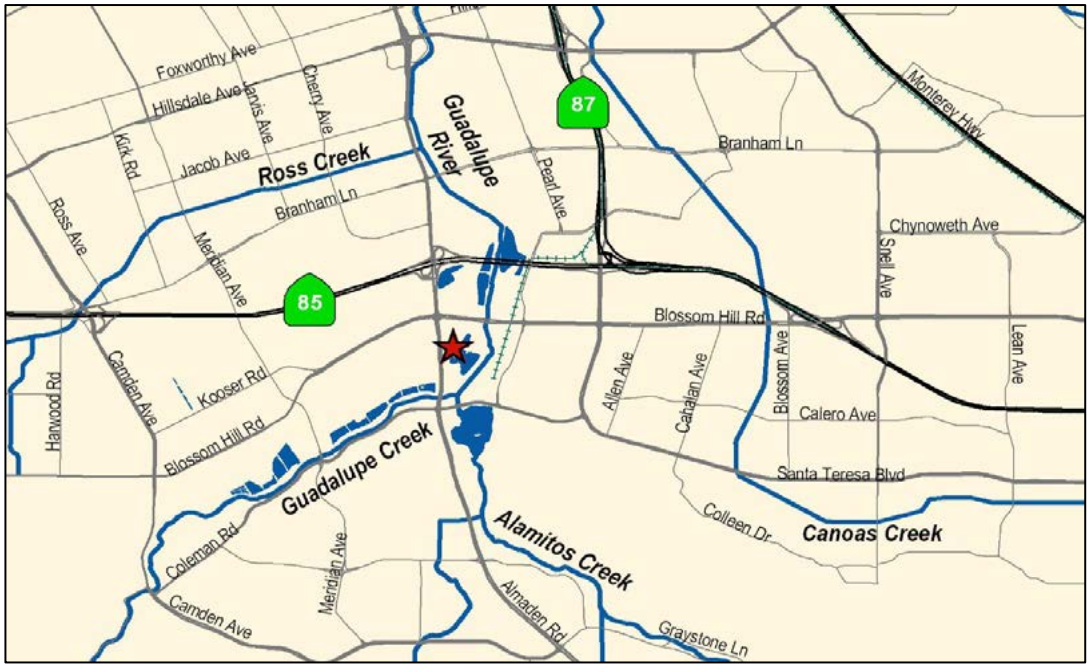
Screenshot of the SCVWD Public Records web page

PROJECT DESCRIPTION

This project plans, designs, and implements a software solution to accomplish the following objectives:

- Issue formal notification of litigation holds.
- Search and locate/identify electronically stored information (ESI).
- Collect, preserve, process, review, and analyze ESI.
- Produce ESI in context to litigation, in response to California Public Records Act (CPRA) requests, and other government investigations.

PROJECT LOCATION

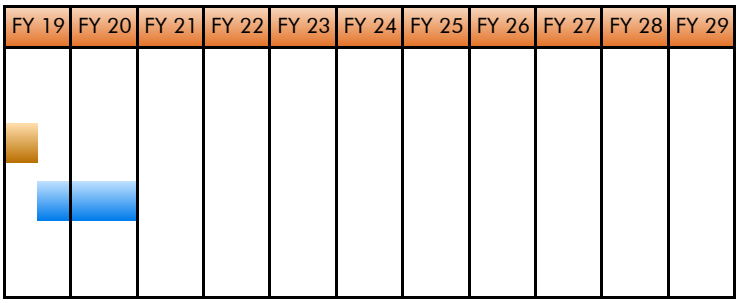


★ Project Location

SCHEDULE & STATUS

April 2017 to June 2020

Phase	Cost
Plan	-
Design	-
Construct	52
Closeout	-
	545



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY18	FY19	FY20	FY21	FY22	FY23	FY24	Future	
73274011-E-Discovery Management System	493	28	24	0	0	0	0	0	545
with inflation	493	28	24	0	0	0	0	0	545

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY18	FY19		FY20	FY21	FY22	FY23	FY24	Future	
73274011-E-Discovery Management System	545	0	24	0	0	0	0	0	0	545

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Information Technology Fund	545
Other Funding Sources	0
Total	545

OPERATING COST IMPACTS

Operation cost impacts will be provided after completion of the planning phase.

USEFUL LIFE: Not available

Project	**WTP-WQL Network Equipment**
Program	Information Technology
Priority No.	46
Project No.	95274003
District Contact	Michael Cook MCook@valleywater.org

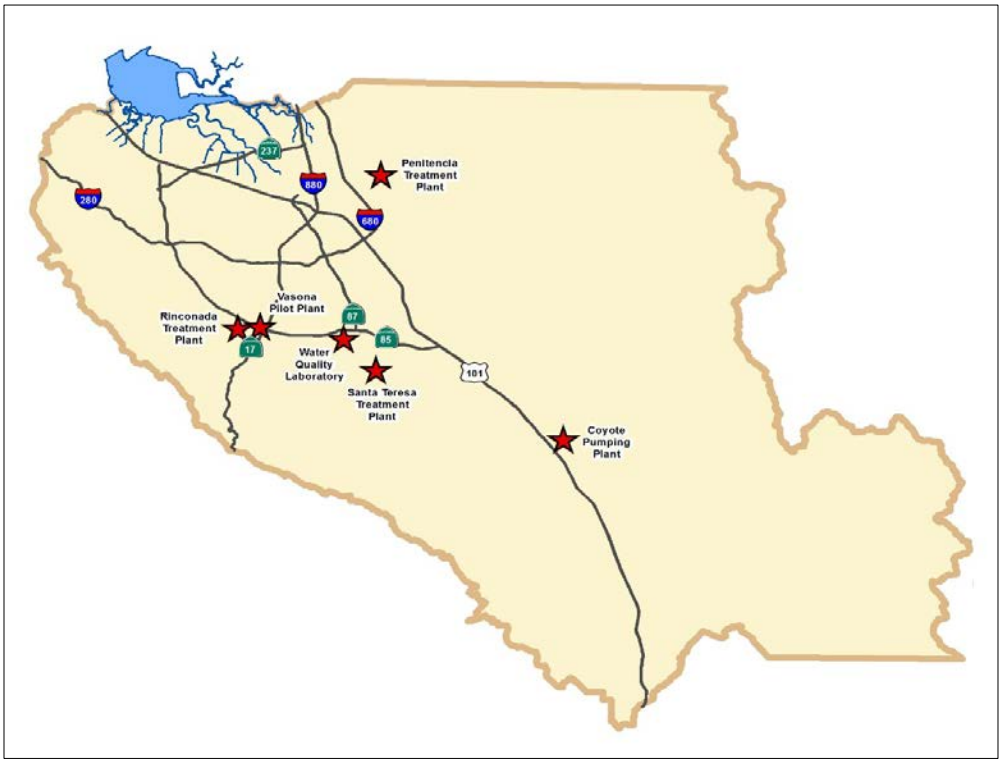
View of network equipment to be modernized at the Water Quality Lab

PROJECT DESCRIPTION

This project plans, designs, and implements upgrades to the existing network to ensure that the District has a current and robust computer network to accomplish the following objectives:

- Deliver greater access speeds.
- Restore vendor maintenance.
- Improve software application performance.
- Provide a path to meet future data communications needs.

PROJECT LOCATION



★ Project Location

SCHEDULE & STATUS

July 2014 to June 2032

Phase	Cost
Plan	-
Design	-
Construct	9,257
Closeout	-
	9,915

FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY18	FY19	FY20	FY21	FY22	FY23	FY24	Future	
95274003-WTP-WQL Network Equipment	1,124	1,599	184	0	85	1,274	2,456	3,193	9,915
with inflation	1,124	1,599	184	0	97	1,519	3,061	4,767	12,351

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY18	FY19		FY20	FY21	FY22	FY23	FY24	Future	
95274003-WTP-WQL Network Equipment	2,221	502	0	184	0	97	1,519	3,061	4,767	12,351

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	12,351
Other Funding Sources	0
Total	12,351

OPERATING COST IMPACTS

Upon completion of this project operating costs are anticipated to increase by $37,000 beginning in FY 2033 with an increase of 3% each year after that to pay for hardware maintenance agreements.

USEFUL LIFE: 10 Years

Project	**Capital Construction Management System**
Program	Water Supply - Treatment
Priority No.	27
Project No.	95074039
District Contact	Nina Hawk NHawk@valleywater.org

PROJECT DESCRIPTION

This project selects and implements a new capital project management software to accomplish the following objectives for large capital projects:

- Tracking of overall project performance
- Management of entire project lifecycle: planning, design, construction, operations
- Improve decision-making by evaluating real-time data
- Establish centralized document management and control.

PROJECT LOCATION

No Map is provided for this project

SCHEDULE & STATUS

July 2019 to June 2024

Phase	Cost
Plan	-
Design	-
Construct	1,084
Closeout	-
	1,084

FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY18	FY19	FY20	FY21	FY22	FY23	FY24	Future	
95074039-Capital Construction Management System	0	0	1,084	0	0	0	0	0	1,084
with inflation	0	0	1,084	0	0	0	0	0	1,084

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY18	FY19		FY20	FY21	FY22	FY23	FY24	Future	
95074039-Capital Construction Management System			0	1,084	0	0	0	0	0	1,084

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	1,084
Other Funding Sources	0
Total	1,084

OPERATING COST IMPACTS

N/A

USEFUL LIFE: N/A

Financial Planning

Financial Planning and Summary

CIP FINANCIAL PLANNING

Board policy regarding financial planning and budgeting provides the foundation for CIP financial planning. The policy states:

Executive Limitation EL-4, "Financial planning for any fiscal year shall be aligned with the Board's Ends, not risk fiscal jeopardy, and be derived from a multi-year plan."

> Executive Limitation EL-4.3, "A BAO shall include credible projection of revenues and expenses, separation of capital and operational items, cash flow, and disclosure of planning assumptions."
>
> Executive Limitation EL-4.4, "A BAO shall plan the expenditure in any budget period within the funds that are conservatively projected to be received or appropriated from reserves in that period."

KEY REVENUES SOURCES

Water Charges

- Water charges include a ground water production charge, which is equivalent to the basic user charge, and is associated with the benefit of managing groundwater supplies. The groundwater charge is applied to water extracted from the groundwater basin in Zones W-2 and W-5. The basic user charge is applied to other types of water delivered by the District. There are two rates: one for agricultural water and one for municipal and industrial water.
- A treated water surcharge, which is associated with the benefit of receiving treated water, is levied in addition to the basic user charge on water delivered from the District's water treatment plants.

Property Tax

Santa Clara County allocates property tax revenue to the District from ad valorem taxes levied on land within the county.

Special Parcel Tax

A special parcel tax, with a 2016 sunset, was approved by the voters in Santa Clara County in November 2000. This revenue source was restricted to financing the costs of the District's Clean, Safe Creeks and Natural Flood Protection Program. In November 2012 the special parcel tax was continued by voter approval to 2028. This revenue can be used for both the continuing Clean, Safe Creeks and new Safe, Clean Water programs.

Benefit Assessments

Benefit assessment revenue consists of levies approved by voters in 1986 and 1990 to support financing for flood control capital improvements. The ongoing budget amount is approximately 1.25 times the duly authorized annual debt service requirements for each Watershed.

Capital Reimbursements

Capital reimbursement revenues are from local, state and federal partners for capital projects carried on cooperatively by the District and its partners. The District fronts the partners' shares of capital expenditures and receives reimbursements from the partners at a later time.

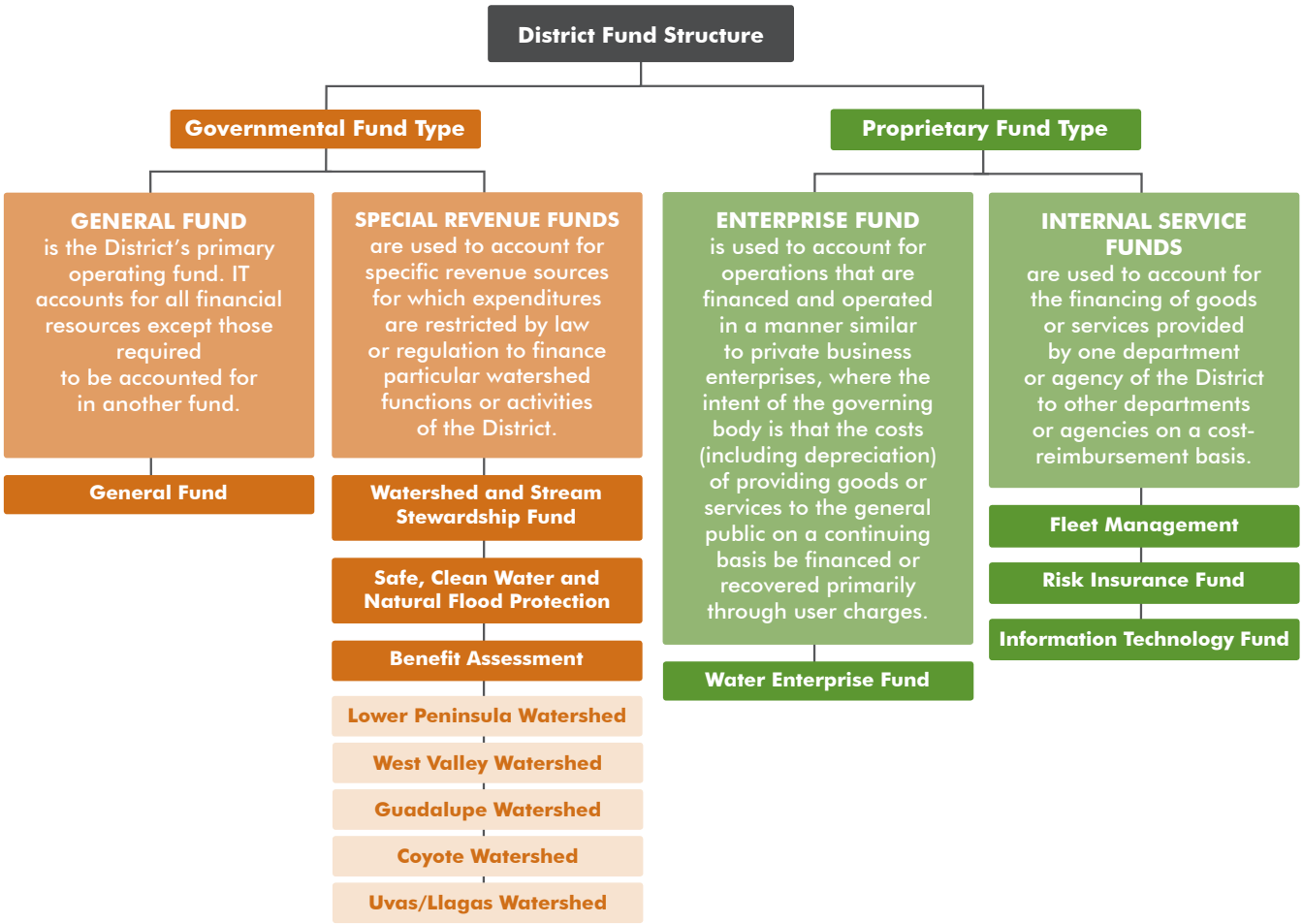
Interest

Interest is earned from the District's investment portfolio.

Financial Planning and Summary

District Fund Structure

The District's revenue sources are organized into eight funds. Each fund has specific revenue sources according to their intended purposes, and each fund is an independent accounting entity with a self-balancing set of accounts comprised of its assets, liabilities, fund equity, revenue, and expenditures or expenses, as appropriate.



Revenue by Fund ($K)

FUND NAME	FY18 Actual	FY19 Adopted	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29
Water Utility Enterprise	286,001	282,097	320,917	361,241	380,388	412,211	551,761	576,871	610,505	662,147	705,718	586,476
Watershed Stream Stewardship	120,856	94,459	97,168	114,710	101,443	125,474	111,011	112,331	110,672	114,793	118,783	123,474
Safe, Clean Water and Natural Flood Protection	57,574	60,116	61,413	62,240	60,883	54,985	52,098	53,670	55,070	56,313	57,938	-
Benefit Assessment	14,778	14,778	13,445	13,456	13,454	13,444	13,443	6,850	6,855	6,852	6,855	6,856
General	8,205	8,375	8,568	8,878	9,199	9,533	9,880	10,240	10,614	11,003	11,407	11,827
Internal Service	829	348	660	566	535	554	574	595	616	638	661	685
TOTAL	488,243	460,172	502,172	561,090	565,903	616,202	738,767	760,557	794,331	851,746	901,362	729,318

Note: Internal Service is the combination of the Fleet Management, IT Capital, and Risk Funds

Financial Planning and Summary

Revenue Projections

The District regularly updates the projected revenues based on the best information available.

- Revenues from water charges are estimated based on projections of water demand for residential, commercial and industrial, and agricultural consumption combined with rates per acre-foot. Rates are set at a level that will provide revenue needed to meet operating and capital needs.
- Revenues from property taxes, special parcel taxes, and benefit assessments are estimated based on projection of growth in assessed value and number of developed parcels in Santa Clara County.
- Interest earnings are estimated based on the projected average cash balances during the fiscal year and expected yield from the District's investment portfolio.
- Revenue from capital reimbursements partnerships are estimated based on the terms of agreements executed by the District and its partners.

Expenditure Projections

The District regularly updates the operation and capital expenditures based on the best information available.

Each capital project cost estimate includes the yearly expenditures through completion based on the project's scope and schedule. The expenditures are monitored regularly and updated when necessary, e.g. expenditures are updated when a project's scope changes. A management review process is enforced to ensure only justified expenditure changes are approved.

Operation cost projections for the next 15 years are updated annually and are based on assumptions derived from the District's strategic plans, including the impact of completed capital projects. Capital and operations expenditure projections are the foundation for the development of the District's budget.

Financial Analysis

The District regularly performs financial analysis to comply with the Board's Financial Planning/Budgeting Policy. The District uses sophisticated financial models to perform the analysis for each fund. The projected operation expenditures, capital expenditures, and revenues for the next ten years are incorporated into the financial models to analyze the health of each fund under various economic scenarios. This process assures that funds will be available when needed to implement the CIP.

The financial analysis generates alternatives for funding capital projects based on the available yearly revenues, from all sources, allocated to the capital program, and the debt financing capacity of each fund. The financial analysis establishes the parameters within which the capital project schedule is developed.

Debt Projections and Debt Ratios

Debt is managed at the District depending on the type of District business involved. The SCW program approved by the voters in 2012 includes the authority to issue debt against future revenue in order to accelerate completion of projects sooner. Debt service on outstanding benefit assessment debt is funded by benefit assessments levied on property owners in the county.

The water utility business, on the other hand, uses a combination of short-term and long-term debt financing in conjunction with pay-as-you-go financing to lessen impacts to the water rate caused by fluctuations in capital funding needs. In the 1984 general election, Measure B was passed by the voters, which gave the District's water utility the authority to issue bonds on an "as required" basis. Debt service on outstanding debt is paid from water revenues. Bond covenants stipulate that the District must maintain a 1.25 debt coverage ratio on all parity bonds. The long-term financial analysis targets a debt coverage ratio of 2.0, which helps establish the parameters for capital planning that ensure bond covenants will be met.

The District currently enjoys credit ratings that are among the highest for a water-related governmental entity in the state of California, which helps keep interest costs borne by the District at a minimum.

Relationship between the Operating Budget and CIP

Whenever the District commits to capital improvements, there is a potential for associated long-range commitment of operating funds. For example, if 20-year bonds are issued to finance capital needs, then the operating funds will need to budget debt service payments for the next two decades. For this reason, it is important to evaluate capital commitments in the context of their long-range operating impact.

In addition to the long-range debt service payments, some capital projects affect future operating budgets either positively or negatively due to an increase or decrease in maintenance and operation costs. Such impacts vary widely from project to project and are evaluated individually during the project development stage. The District is committing to a potential change in the operating budget when a capital project is approved.

The projected debt service payments and the positive or negative operating budget impacts are important factors considered in the District's financial analysis.

This chart identifies the operating budget impacts to each fund from projected debt service payments. The debt service payment in the Watershed Stream Stewardship Fund is a total of payments associated with each individual watershed.

Debt Payment Schedule ($K)

Fund	FY19	FY20	FY21	FY22	FY23	FY24
General Fund	474	476	474	473	472	472
Benefit Assessment Fund	12,211	11,153	11,094	11,090	11,086	11,087
Safe, Clean Water and Natural Flood Protection Fund	1,129	3,102	3,169	4,566	4,566	4,579
Water Utility Enterprise Fund	41,881	43,117	47,593	56,354	72,922	87,998
Information Technology Fund	-	-	-	-	-	-
TOTAL	55,696	57,847	62,329	72,484	89,045	104,136

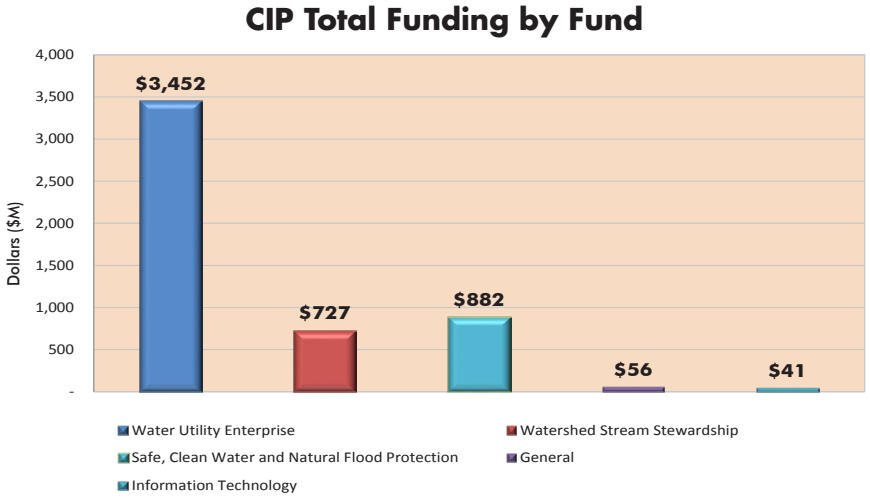
This chart identifies the net operating budget impacts to each fund resulting from annual maintenance and/or operating cost for newly completed capital projects. Additional information regarding operating impacts related to individual projects can be found on the project pages.

Estimated Operating Impacts ($K)

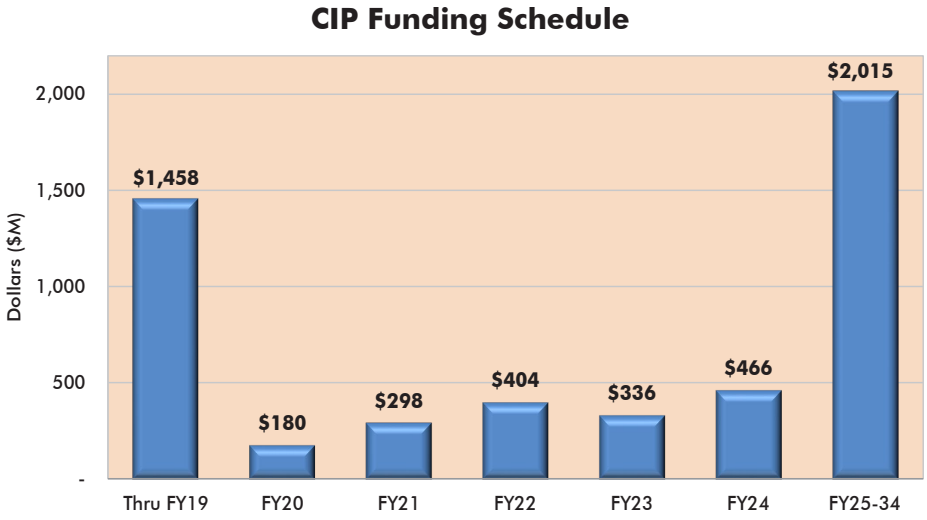
Fund	FY19	FY20	FY21	FY22	FY23	BEYOND
General Fund	-	-	-	-	-	-
Watershed Stream Stewardship Fund	35	4,035	35	60	4,070	70
Safe, Clean Water and Natural Flood Protection Fund	50	50	150	150	150	730
Water Utility Enterprise Fund	25	(167)	(167)	(229)	1,241	1,358
Information Technology Fund	164	169	174	179	185	190
TOTAL	274	4,087	192	160	5,646	2,348

CIP FUNDING SUMMARY

Of the $5.158 billion in total District funding for current and future projects, the Board appropriated $1.458 billion in prior years through June 30, 2019 (the end of Fiscal Year 2018-19). This year's CIP process identified additional funding needs of $3.699 billion to complete the projects in the CIP, with $180 million allocated in Fiscal Year 2019-20 and a total of $3.519 billion proposed for future years.



The needed $5.158 billion to implement the 67 projects as defined in the CIP are funded by four of the District's seven Funds.



The following chart shows the funding schedule for the $5.158 billion to implement the 67 projects.

CIP Project Funding Schedule for Water Utility Enterprise Fund ($K)

PROJECT NAME	Through FY18	FY19	FY19 Unspent	FY20	FY21	FY22	FY23	FY24	FY25-34	TOTAL
Almaden Dam Improvements	13,040	3,764	1,850	-	-	-	-	-	53,806	70,610
Anderson Dam Seismic Retrofit (C1)	39,499	10,615	-	4,180	3,890	109,381	88,022	99,469	208,227	563,283
Calero and Guadalupe Dams Seismic Retrofits	30,157	1,911	839	826	1,193	12,867	25,641	25,694	142,266	240,555
Coyote Pumping Plant ASD Replacement	536	785	-	1,027	2,845	6,115	4,261	667	85	16,321
Coyote Warehouse	5,844	1,034	881	1,601	1,120	74	72	-	-	9,745
Dam Seismic Stability Evaluation	18,812	2,793	-	631	444	5,706	477	498	1,359	30,720
Small Capital Improvements, San Felipe Reach 1-3	n/a	3,701	-	7,433	3,593	3,482	1,323	1,934	37,581	59,047
Pacheco Reservoir Expansion Project	-	17,260	42	42,015	44,253	33,307	25,309	243,929	939,178	1,345,251
10-Year Pipeline Rehabilitation (FY18-FY27)	23,989	15,536	-	26,131	15,415	5,472	4,958	5,945	17,282	114,728
FAHCE Implementation	-	-	-	-	4,739	4,379	14,691	-	106,609	130,418
Pacheco/Santa Clara Conduit Right of Way Acquisition	2,113	1,514	1,982	-	966	319	-	-	-	4,912
SCADA Remote Architecture & Communications Upgrade	962	251	300	256	352	981	1,026	1,072	2,432	7,332
Small Capital Improvements, Raw Water Transmission	n/a	849	-	1,215	33	136	-	260	2,097	4,590
Small Capital Improvements, Treated Water Transmission	n/a	-	-	178	59	203	179	75	199	893
Treated Water Isolation Valves	-	529	515	742	86	2,229	2,304	2,382	69	8,341
Westside Retailer Interties	80	67	73	-	3	374	1,417	120	-	2,061
Vasona Pump Station Upgrade	831	549	1	525	1,475	20,487	560	-	-	24,427
PWTP Residuals Management	-	-	-	-	710	1,484	7,856	-	-	10,050
RWTP Residuals Remediation	43,573	-	6,219	2,633	14,480	1,860	2,632	692	-	65,870
RWTP Reliability Improvement	164,365	33,232	10,692	14,566	48,664	33,957	13,817	112	-	308,713
RWTP Treated Water Valves Upgrade	8,594	8	-	21	-	-	-	-	-	8,623
Small Capital Improvements, Water Treatment	n/a	3,577	-	11,353	3,029	3,800	1,026	5,893	30,354	59,032
STWTP Filter Media Replacement Project	-	-	-	203	1,179	2,242	5,234	1,845	-	10,703
Water Treatment Plant Electrical Improvement Project	-	-	-	203	1,340	2,574	6,036	2,116	-	12,269
Expedited Purified Water Program (EPWP)	20,376	4,440	-	2,480	3,754	2,288	5,628	11,593	169,710	220,269
South County Recycled Water Pipeline	36,557	-	10,396	-	9,678	11,581	-	-	-	57,816
Stevens Creek Fish Passage Enhancement D4.x	850	-	-	-	2,160	6,809	3,642	3,700	2,952	20,113
Capital Construction Mgmt System	-	-	-	1,084	-	-	-	-	-	1,084
WTP-WQL Network Equipment	2,221	502	-	184	-	97	1,519	3,061	4,767	12,351
TOTAL	412,314	102,917	33,790	119,487	167,133	271,773	217,566	420,906	1,739,712	3,451,808

FY 2018-19 Funds to be reappropriated

CIP Project Funding Schedule for Watershed and Stream Stewardship Fund ($K)

PROJECT NAME	Through FY18	FY19	FY19 Unspent	FY20	FY21	FY22	FY23	FY24	FY25-34	TOTAL
Palo Alto Flood Basin Tide Gate Structure Improvements	1,158	1,992	-	1,918	7,048	114	-	-	-	12,230
Permanente Creek, SF Bay to Foothill Expressway	17,541	-	178	-	-	-	-	-	-	17,541
San Francisquito Creek, SF Bay thru Searsville Dam	4,064	-	-	-	-	-	-	-	-	4,064
San Francisquito Creek, Early Implementation	1,614	-	-	-	-	-	-	-	-	1,614
Canoas Creek, Rodent Damage Repair	7,397	-	504	-	-	-	-	-	-	7,397
Guadalupe River Tasman Dr - I-880	-	-	-	1,000	-	-	-	-	-	1,000
Berryessa Ck, Lower Penitencia Ck to Calaveras Blvd Phs 1	50,191	-	3,394	-	-	-	-	-	-	50,191
Berryessa Ck, Lower Penitencia Ck to Calaveras Blvd Phs 2	58,402	17,473	2,888	-	679	399	-	-	-	76,953
Berryessa Ck, Lower Penitencia Ck to Calaveras Blvd Phs 3	-	-	-	-	-	-	-	-	73,203	73,203
Cunningham Flood Detention Certification	9,961	1,290	52	235	33	-	-	-	-	11,519
Lower Penitencia Ck Improvements, Berryessa to Coyote Cks.	14,416	1,881	1,640	8,989	601	628	322	-	-	26,837
Lower Silver Creek, I-680 to N. Babb Rd (Reach 4 Planning)	2,371	-	-	-	-	-	-	-	-	2,371
Lower Silver Creek, I-680 to Cunningham (Reach 4-6)	95,759	507	38	739	174	57	60	-	-	97,296
Lower Silver Creek, I-680 to Cunningham, Reimbursable (Reach 4-6)	2,912	-	883	-	-	-	-	-	-	2,912
Upper Penitencia Ck, Coyote Ck-Dorel Dr, Corps	8,970	494	-	-	-	-	-	-	-	9,464
Upper Penitencia Ck, Coyote Ck-Dorel Dr, LERRDs	7,347	-	4,990	-	-	-	-	-	-	7,347
Llagas Creek–Lower, Capacity Restoration, Buena Vista Road to Pajaro River	7,046	-	2,208	-	-	587	3,265	2,999	-	13,897
San Francisco Bay Shoreline (E7)	29,188	6,722	6,530	4,759	18,386	5,586	18,671	10,564	1,195	95,071
San Francisco Bay Shoreline	16,788	-	888	1,765	18,386	5,512	18,075	9,941	-	70,467
Watersheds Asset Rehabilitation Program	14,562	9,893	-	11,375	11,787	8,950	9,254	9,568	106,186	181,575
SMP Mitigation, Stream and Watershed Land Preservation	16,733	-	840	36	-	-	-	-	-	16,769
Stevens Creek Fish Barrier Removal - 100%	-	-	-	-	328	3,526	3,642	3,700	2,952	14,148
FAHCE Stevens Creek Fish Passage Planning - 10%	85	-	-	-	-	-	-	-	-	85
FAHCE Stevens Creek Moffett Ave Fish Ladder - 10%	-	-	-	-	143	199	-	-	-	341
FAHCE Stevens Creek Multi-Port Outlet at Dam - 10%	-	-	-	-	41	129	-	-	-	170
Ogier Ponds Design & Construction	-	-	-	-	-	1,141	1,193	1,869	11,642	15,845
Salt Ponds A5-11 Restoration	4,987	95	875	-	590	639	1,352	469	-	8,132

FY 2018-19 Funds to be reappropriated

CIP Project Funding Schedule for Watershed and Stream Stewardship Fund ($K) (cont'd)

PROJECT NAME	Through FY18	FY19	FY19 Unspent	FY20	FY21	FY22	FY23	FY24	FY25-34	TOTAL
Watershed Habitat Enhancement Studies	1,257	1,016	503	20	-	-	-	-	-	2,293
TOTAL	344,410	34,641	19,881	26,077	39,809	21,881	37,163	28,546	193,983	726,511

FY 2018-19 Funds to be reappropriated

Project Funding Schedule for Safe, Clean Water and Natural Flood Protection Fund ($K)

PROJECT NAME	Through FY18	FY19	FY19 Unspent	FY20	FY21	FY22	FY23	FY24	FY25-34	TOTAL
IRP2 Additional Line Valves (A3)	-	1,090	753	399	2,623	4,820	2,492	-	91	11,515
Main & Madrone Pipelines Restoration (A1)	16,944	292	1	334	-	-	-	-	-	17,570
Permanente Creek, SF Bay to Foothill Expressway	73,656	7,690	-	2,609	237	23	-	-	-	84,215
San Francisquito Creek, SF Bay thru Searsville Dam (E5)	6,782	-	111	-	-	-	-	-	-	6,782
San Francisquito Creek - Construction, SF Bay to Middlefield Road (E5)	42,416	5,070	-	2,016	5,264	21,772	-	-	-	76,538
Sunnyvale East and West Channels	30,997	-	3,717	4,441	11,829	11,441	10,219	-	-	68,927
Guadalupe Rv–Upper, Fish Passage Mods	2,651	-	-	-	-	-	-	-	-	2,651
Guadalupe Rv–Upper, I-280 to SPRR (R6)	34,619	-	1,163	87	491	2,638	36	-	-	37,871
Guadalupe Rv–Upper, SPRR-Blossom Hill (R7-12)	82,883	6,516	19,954	-	15,423	8,031	5,865	-	-	118,718
Guadalupe Rv–Upper, Actuals chg to other proj numbers	7,887	-	-	-	-	-	-	-	-	7,887
Los Gatos Creek Restoration & Flood Protection Project	-	-	-	226	382	285	9,200	-	-	10,093
Berryessa Ck, Calaveras-I-680 - Corps	35,566	-	6,920	-	-	-	-	-	-	35,566
Berryessa Ck, Calaveras-I-680 - Reimbursable	18,777	209	208	1	-	-	-	-	-	18,987
Coyote Creek, Montague Expressway to Tully Road (E3)	12,248	2,259	-	941	1,065	7,110	9,898	7,163	423	41,107
Upper Penitencia Ck, Coyote Ck-Dorel Dr, Corps (E4)	385	1,525	-	1,305	-	-	239	2,257	38,304	44,015
Llagas Creek–Upper, Reimbursable (E6b)	43,057	-	2,893	1,982	-	-	-	-	-	45,039
Llagas Creek–Upper, Corps Coordination (E6a)	40,895	-	13,210	9,741	33,357	33,468	23,283	2,763	3,306	146,813
Llagas Creek–Upper, Technical Studies	1,446	-	-	-	-	-	-	-	-	1,446
Llagas Creek–Upper, Design	22,692	5,498	-	261	273	285	298	249	400	29,956
San Francisco Bay Shoreline - EIA 11 Design & Partial Construction (E7)	7,794	6,722	4,076	2,994	-	-	-	-	-	17,510
San Francisco Bay Shoreline - Other EIAs Planning (E7)	3,757	-	1,566	-	-	74	596	623	1,195	6,245
Hale Creek Enhancement Pilot Study (D6)	2,251	2,581	3,623	21	-	-	-	-	-	4,853
Almaden Lake Improvements (D4.1a)	4,363	191	75	1,153	8,487	8,523	8,779	-	-	31,496
South Bay Salt Ponds Restoration (D8)	548	-	267	-	-	-	-	-	3,965	4,513
SCW Fish Passage Improvements (D4.3; Bolsa, Evelyn, Singleton)	3,888	392	1,308	1,048	-	-	-	-	-	5,328
Creek Bank Stability (ie. Comer Debris Basin (D6.2))	-	-	-	-	-	290	1,184	218	-	1,692

FY 2018-19 Funds to be reappropriated

Project Funding Schedule for Safe, Clean Water and Natural Flood Protection Fund ($K) (cont'd)

PROJECT NAME	Through FY18	FY19	FY19 Unspent	FY20	FY21	FY22	FY23	FY24	FY25-34	TOTAL
Creek Bank Stability (D6.1)	-	-	-	-	-	1,837	-	-	-	1,837
Ogier Ponds Separation from Coyote Creek (D4.1b)	-	1,000	500	595	1,603	-	-	-	-	3,198
TOTAL	496,502	41,035	60,345	30,154	81,034	100,597	72,089	13,273	47,684	882,368

FY 2018-19 Funds to be reappropriated

Project Funding Schedule for General Fund ($K)

PROJECT NAME	Through FY18	FY19	FY19 Unspent	FY20	FY21	FY22	FY23	FY24	FY25-34	TOTAL
Pacheco Reservoir Feasibility Study	448	866	-	-	-	-	-	-	-	1,314
Facility Management, Small Capital Improvements	n/a	2,572	-	2,063	2,125	2,190	2,258	2,327	24,455	37,990
Headquarters Operations Building	-	-	-	-	4,259	6,779	4,770	-	-	15,808
PeopleSoft System Upgrade & Expansion	1,199	-	-	-	-	-	-	-	-	1,199
TOTAL	1,647	3,438	-	2,063	6,384	8,969	7,028	2,327	24,455	56,311

FY 2018-19 Funds to be reappropriated

Project Funding Schedule for Information Technology Fund ($K)

PROJECT NAME	Through FY18	FY19	FY19 Unspent	FY20	FY21	FY22	FY23	FY24	FY25-34	TOTAL
Data Consolidation	940	83	883	59	77	80	-	-	-	1,239
IT Disaster Recovery	2,396	-	2,133	-	99	-	-	-	-	2,495
ERP System Implementation	10,948	3,660	7,180	-	2,863	-	-	-	-	17,471
Software Upgrades & Enhancements	1,844	559	-	781	906	411	2,256	1,423	9,394	17,574
Telephone System Voiceover IP	-	-	-	1,116	136	-	-	-	-	1,252
E-Discovery Management System	545	-	24	-	-	-	-	-	-	545
TOTAL	16,673	4,302	10,220	1,956	4,081	491	2,256	1,423	9,394	40,576

FY 2018-19 Funds to be reappropriated

CIP Funding Schedule Summary for All Funds ($K)

FUND NAME	Through FY18	FY19	FY19 Unspent	FY20	FY21	FY22	FY23	FY24	FY25-34	TOTAL
Water Utility Enterprise	412,314	102,917	33,790	119,487	167,133	271,773	217,566	420,906	1,739,712	3,451,808
Watershed Stream Stewardship	344,410	34,641	19,881	26,077	39,809	21,881	37,163	28,546	193,983	726,511
Safe, Clean Water and Natural Flood Protection	496,502	41,035	60,345	30,154	81,034	100,597	72,089	13,273	47,684	882,368
General	1,647	3,438	-	2,063	6,384	8,969	7,028	2,327	24,455	56,311
Information Technology	16,673	4,302	10,220	1,956	4,081	491	2,256	1,423	9,394	40,576
TOTAL	1,271,546	186,333	124,236	179,737	298,441	403,711	336,102	466,475	2,015,228	5,157,573

FY 2018-19 Funds to be reappropriated

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Appendices

WATER SUPPLY CAPITAL PROJECTS

Priority Ranking Criteria

NORMALIZED PRIORITY SCORE = 0

Project Name Here

RAW SCORE = 0

PRIMARY OBJECTIVE (75%)

Water Supply (E 2) 0

	I	P	
A1	☐	☐	Project maintains existing water utility infrastructure or is required to meet the current and future water supply demand, comply with water quality standards or meet other regulatory requirements. **I = Impact (H, M, L); P = Probability (H, M, L)**
A2	☐	☐	Project expands water utility infrastructure or provides additional water supply to meet current or near future demand. **I = Impact (H, M, L); P = Probability (H, M, L)**
B	☐		Project increases water supply portfolio, increases operation flexibility, improves maintenance capabilities, adds efficiency, or improves post-disaster reliability of water utility infrastructure [Example: improving the systematic reliability of water utility infrastructure to continually perform during and after a devastating event; improving the systematic flexibility of water utility infrastructure to utilize various source water; or adding redundancy so infrastructure can be taken off-line for maintenance]. **(H, M, L)**
C	☐		Timing of when project is needed to meet water supply demands, water quality standards, or other regulations. **(I = Immediately (0-3 yrs.); S = Short-term (3-5 yrs.); L = Long-term (5+ yrs.))**

COMMUNITY ENGAGEMENT (7.5%)

Social Factor - Check if applicable 0

- ☐ Promotes Emergency Recovery
- ☐ Addresses projected water supply demand indentified by Cities/County

Positive Interaction (E 4) - Check all that apply

- ☐ With the Community
- ☐ With other agencies

ENVIRONMENTAL SUSTAINABILITY (7.5%)

Water Quality (E 3.2) - Check if applicable 0

- ☐ Promotes drinking water quality
- ☐ Protects Ground Water
- ☐ Protects Surface Water
- ☐ Addresses Storm Water issues

Natural Resources Sustainability (E 3.2) - Check all that apply

- ☐ Promotes water use efficiency
- ☐ Reduces reliance on imported water
- ☐ Promotes stream management
- ☐ Encourages Water Conservation
- ☐ Protects Upland or Wetland Habitat
- ☐ Expands or Improves Fish Habitat
- ☐ Includes Climate Change Elements
- ☐ Promotes energy efficiency or incorporates energy efficient features

COST RECOVERY (10%)

Lifecycle costs are minimized - Check One 0

- ☐ Annual cost savings of more than $500,000
- ☐ Annual cost savings of $200,000 to $500,000
- ☐ Annual cost savings of less than $200,000 (reference ½ PY)

Funding Available from Other Agencies - Check One

- ☐ Over 50% of project costs available from other agencies
- ☐ 26% to 50% of project costs available from other agencies
- ☐ Up to 25% of project costs available from other agencies

FLOOD PROTECTION PROJECTS

Priority Ranking Criteria

NORMALIZED PRIORITY SCORE = 0

Project Name Here

RAW SCORE = 0

PRIMARY OBJECTIVE (60%)

Flood Protection (E 3) 0

I P

☐ ☐ Project restores existing watershed infrastructure to its intended level of flood protection.
I = Impact on home, school, or business parcels (H = 1000+, M = 200 to 1000 , L = <200);
P = Probability based on frequency of flooding (H = every 10 yrs, M = every 25 yrs, L = every 50+ yrs)

☐ Project is a Board or USACE priority, improves watershed infrastructure to achieve the committed level of flood protection, or provides flood protection beyond the level of commitment. **(H, M, L)**

☐ Timing of when the flood protection benefit will be realized by the community.
I = Immediate (0-3 years); S = Short-term (3-5 years); L - Long-term (more than 5 years)

COMMUNITY ENGAGEMENT (10%)

Positive Interaction (E 4) - Check all that apply 0

☐ With the Community

☐ With other agencies

☐ Environmental Justice

Good Neighbor (E 4) - Check all that apply

☐ Graffiti removal or Prevention Features

☐ Improves aesthetics of project location

☐ Trash removal features (vortex weirs)

ENVIRONMENTAL SUSTAINABLITY (15%)

Ecological Function (E 3.1, 4.1) 0

☐ Project incorporates at least one of the following: removal of fish barrier; structural improvements to fish habitat; inclusion of riparian habitat (planting, setback or protect in place); inclusion of SRA plantings and/or features designed to improve water temperature; improvements to facilitate habitat connectivity, upland habitat and/or wetland habitat protection or preservation; or reduction of hardscape elements.

Physical Function (E 3.2)

☐ Project incorporates at least one of the following: a holistic watershed approach; energy efficiency; geomorphic design elements; erosion control (sediment source reduction); floodplain connectivity; or protection from sea level rise.

Water Quality and Supply (E 3.2)

☐ Project incorporates TMDL improvements or provides opportunity for recharge

Trails & Open Space (E4.2, E4.3) - Check all that apply

☐ Project incorporates trail friendly features, provides protection or preservation of open space, or provides/improves Bicycle Commute Route

COST RECOVERY (15%)

Funding Available from Other Agencies - Put an "X" in the % column based on the percenatage eligible for cost sharing; Put an "H", "M", or "L" in the C column based on the level of confidence 0

% C

☐ ☐ 50% or more of project costs available from other agencies
% = Percentage of cost provided; C = Confidence Level (H, M, L)

☐ ☐ 26% to 49% of project costs available from other agencies
% = Percentage of cost provided; C = Confidence Level (H, M, L)

☐ ☐ Up to 25% of project costs available from other agencies
% = Percentage of cost provided; C = Confidence Level (H, M, L)

WATER RESOURCES STEWARDSHIP PROJECTS

Priority Ranking Criteria

NORMALIZED PRIORITY SCORE = 0

Project Name

RAW SCORE = 0

PRIMARY OBJECTIVE (55%)

Stewardship Projects 0

- A ☐ Project creates Stewardship features to achieve stewardship commitments. **(H, M, L)**
- B ☐ Stewardship activities beyond the current commitment. **(H, M, L)**

COMMUNITY ENGAGEMENT (15%)

Positive Interaction (E 4) - Check all that apply 0

- ☐ With the Community
- ☐ Environmental Justice
- ☐ With other agencies

Good Neighbor (E 4) - Check all that apply

- ☐ Graffiti removal or Prevention Features
- ☐ Trash removal features (vortex weirs)
- ☐ Improves aesthetics of project location
- ☐ Promotes water conservation

Education Element

- ☐ Promotes stream stewardship
- ☐ Promotes flood protection
- ☐ Promotes Bay protection

ENVIRONMENTAL SUSTAINABLITY (15%)

Ecological Function (E 3.2) - Check all that apply 0

- ☐ Fish Barrier Removal / Structural or nonstructural improvement to fish habitat
- ☐ Riparian Habitat (planting, setback or protect in place)
- ☐ SRA Plantings or Improved water temperature
- ☐ Upland Habitat Protection/Preservation
- ☐ Wetland Habitat Protection/Preservation
- ☐ Hardscape Reduction

Physical Stream Function (E 3.2) - Check all that apply

- ☐ Holistic Watershed Approach
- ☐ Geomorphologic Design Elements
- ☐ Erosion Control or Sediment Source Reduction

Water Quality (E 3.2) - Check all that apply

- ☐ Storm Water Treatment (pervious pavement, green roofs, etc.)
- ☐ TMDL Improvements
- ☐ Hazardous Material Removal (Asbestos, Lead, Hydrocarbons, etc.)

Trails & Open Space (E3.3) - Check all that apply

- ☐ Trail friendly features
- ☐ Provides/Improves Bicycle Commute Route
- ☐ Open Space Protection / Preservation
- ☐ Climate change elements

COST RECOVERY (15%)

Funding Available from Other Agencies - Check One 0

%	C	
☐	☐	Over 50% of project costs available from other agencies **% = Percentage of cost provided; C = Confidence Level (H, M, L)**
☐	☐	26% to 50% of project costs available from other agencies **% = Percentage of cost provided; C = Confidence Level (H, M, L)**
☐	☐	Up to 25% of project costs available from other agencies **% = Percentage of cost provided; C = Confidence Level (H, M, L)**

BUILDINGS & GROUNDS PROJECTS

Priority Ranking Criteria

NORMALIZED PRIORITY SCORE = 0

Project Name

RAW SCORE = 0

PRIMARY OBJECTIVE (60%)

Buildings and Grounds (EL 3.4) 0

	I	P	
A	☐	☐	Project maintains or replaces existing building infrastructure to provide continuous housing of existing functions and/or to comply with employer safety standards. **I = Impact (H, M, L); P = Probability (H, M, L)**
B	☐		Project enhances building infrastructure to address treatment of staff issues.
C	☐		Project positions the District to meet projected future space needs.

COMMUNITY ENGAGEMENT (10%)

Positive Interaction (E 4) - Check all that apply 0

- ☐ With the Community
- ☐ With other agencies

Good Neighbor (E 4) - Check all that apply

- ☐ Graffiti removal or Prevention Features
- ☐ Trash removal features (vortex weirs)
- ☐ Improves esthetics of project location

ENVIRONMENTAL SUSTAINABILITY (15%)

Natural Resources Sustainability (E 3.2) - Check all that apply 0

- ☐ Air Quality & Visibility Improvement
- ☐ Energy Efficient Features (Lighting, HVAC, maximize daylight use, etc.)
- ☐ Renewable Energy Use
- ☐ Water Efficient Features: Plumbing fixtures, Landscaping, etc.
- ☐ Recycled Water, rain water or gray water utilized
- ☐ Construction Site Waste Management
- ☐ Recycle/Re-use Solid Waste
- ☐ Reduce Solid Waste Production
- ☐ Use of Recycled or Alternative Building Materials

Trails & Open Space (E3.3) - Check all that apply

- ☐ Trail friendly features
- ☐ Provides/Improves Bicycle Commute Route
- ☐ Open Space Protection / Preservation

COST RECOVERY (15%)

Funding Available from Other Agencies (Grants & Cost-share) - Check One 0

- ☐ Over 50% of project costs available from other agencies
- ☐ 26% to 50% of project costs available from other agencies
- ☐ Up to 25% of project costs available from other agencies

INFORMATION TECHNOLOGY PROJECTS

Priority Ranking Criteria

NORMALIZED PRIORITY SCORE = 0

Project Name

SCORE = 0

PRIMARY OBJECTIVE (75%)	**Information Technology (EL 7.5)**	0
	A ☐ I ☐ P Project maintains existing mission critical software systems and/or Information Technology infrastructure to improve reliability for business continuity; protection of intellectual property information and files from loss or damage. **I = Impact (H, M, L); P = Probability (H, M, L)**	
	B ☐ Project enhances mission critical software systems and/or IT infrastructure to improve user functionality. **(H, M, L)**	
	C ☐ Project enhances mission critical software systems and/or IT infrastructure to meet projected future needs. **(H, M, L)**	
	D ☐ Ties into IT Master Plan finding and/or recommendations (10 pts.)	
COMMUNITY ENGAGEMENT (15%)	**Good Neighbor** - Check all that apply	0
	☐ Program promotes the distribution of information to the community (public transparency)	
	☐ Program provides an opportunity for community interaction with the District.	
COST RECOVERY (10%)	**Funding Available from Other Agencies** - Check One	0
	☐ Over 50% of project costs available from other agencies	
	☐ 26% to 50% of project costs available from other agencies	
	☐ Up to 25% of project costs available from other agencies	

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Appendix B - Project List By Priority

Water Supply Capital Projects in Order of Priority

FUNDED				
FY20 Priority	**Name**	**Total Project Value ($K)**	**Remaining Cost ($K)** (FY-20 to Completion)	**Phase**
100	Anderson Dam Seismic Retrofit (C1)	$563,283	$513,169	Des
92	Dam Seismic Stability Evaluation	$30,721	$9,115	Plng
92	Calero and Guadalupe Dams Seismic Retrofits	$240,427	$209,198	Plng/Des
91	RWTP Reliability Improvement	$308,713	$121,808	Const
84	RWTP Residuals Remediation	$59,914	$22,560	Const
84	RWTP Treated Water Valves Upgrade	$8,623	$21	Const/Closeout
79	Water Treatment Plant Electrical Improvement Project	$12,269	$12,269	Planning
78	10-Year Pipeline Rehabilitation (FY18-FY27)	$114,728	$75,203	Plng/Des/Const
76	Small Capital Improvements, San Felipe Reach 1-3	$59,047	$55,345	Continuing
76	Westside Retailer Interties	$2,061	$1,987	Plng
75	Pacheco/Santa Clara Conduit Right of Way Acquisition	$4,912	$3,267	Design
74	PWTP Residuals Management	$10,050	$10,050	FY21
74	SCADA Remote Architecture & Communications Upgrade	$7,332	$6,419	Plng
73	Small Capital Improvements, Raw Water Transmission	$4,590	$3,741	Continuing
73	Small Capital Improvements, Water Treatment	$59,032	$55,454	Continuing
73	Small Capital Improvements, Treated Water Transmission	$893	$893	Continuing
73	FAHCE Implementation	$130,418	$130,418	Plng
71	Expedited Purified Water Program (EPWP)	$220,269	$195,453	Planning
70	Coyote Pumping Plant ASD Replacement	$16,321	$15,000	Plng
70	Main & Madrone Pipelines Restoration (A1)	$17,570	$334	Const
67	Vasona Pump Station Upgrade	$24,427	$23,048	Plng
62	IRP2 Additional Line Valves (A3)	$11,515	$11,178	Plng/Des
62	Treated Water Isolation Valves	$8,341	$8,327	Plng/Des
65	STWTP Filter Media Replacement Project	$10,703	$10,703	Planning
55	Pacheco Reservoir Expansion Project	$1,345,251	$1,328,033	Plng
52	South County Recycled Water Pipeline	$57,696	$31,535	Design
50	Almaden Dam Improvements	$70,086	$55,132	Des
48	Coyote Warehouse	$9,745	$3,748	$2,098
VALIDATED - UNFUNDED FUTURE PROJECTS				
72	Dam Seismic Retrofit at 2 Dams (Chesbro & Uvas)	$89,500	$89,500	N/A
71	Long-Term Purified Water Program Elements	$207,125	$207,125	N/A
32	So. County Recycled Water New Storage Tank	$7,000	$7,000	N/A
28	Alamitos Diversion Dam Improvements	$3,183	$2,345	N/A
28	Coyote Diversion Dam Improvements	$2,461	$2,138	N/A
25	Land Rights - South County Recycled Water PL	$5,816	$5,816	N/A

Appendix B - Project List By Priority

Flood Protection Capital Projects in Order of Priority

FUNDED

FY20 Priority	Name	Total Project Value ($K)	Remaining Cost ($K) (FY-20 to Completion)	Phase
98	Lower Silver Creek, I-680 to Cunningham (Reach 4-6)	$101,803	$1,175	Construction
83	Cunningham Flood Detention Certification	$11,519	$320	Construction
78	San Francisquito Creek, SF Bay thru Searsville Dam (E5)	$88,998	$29,163	Des/Const
76	Berryessa Creek, Calaveras Boulevard to Interstate 680	$47,949	$525	Closeout
74	San Francisco Bay Shoreline (E7)	$95,071	$65,691	Plng/Des/Const
74	Watersheds Asset Rehabilitation Program	$181,575	$157,120	Plng/Des/Const
70	Llagas Creek–Upper, Buena Vista Avenue to Llagas Road	$223,255	$125,769	Construction
68	Berryessa Ck, Lower Penitencia Ck to Calaveras Blvd	$197,281	$77,497	Const
68	Guadalupe River–Upper, I-280 to Blossom Hill Road (E8)	$167,126	$53,687	Design
66	Upper Penitencia Creek, Coyote Creek to Dorel Drive	$55,846	$42,115	Planning
65	Llagas Creek–Lower, Capacity Restoration, Buena Vista Road to Pajaro River	$13,896	$9,058	Design
65	Lower Penitencia Ck Improvements, Berryessa to Coyote Cks.	$26,837	$12,180	Des/Const
65	Sunnyvale East and West Channels	$68,927	$41,647	Design
62	Permanente Creek, SF Bay to Foothill Expressway	$101,579	$2,870	Const/Closeout
62	Coyote Creek, Montague Expressway to Tully Road (E3)	$41,107	$26,600	Plng
60	Canoas Creek, Rodent Damage Repair	$6,930	$37	Construction
59	Los Gatos Creek Restoration & Flood Protection Project	$10,093	$10,093	Planning
56	Palo Alto Flood Basin Tide Gate Structure Improvements	$12,230	$9,080	Design
45	Guadalupe River Tasman Dr - I-880	$1,000	$1,000	Planning

VALIDATED - UNFUNDED FUTURE PROJECTS

59	Los Gatos Creek Restoration & Flood Protection Project	$10,093	$10,093	Planning
45	Guadalupe River (Montague Exwy to Airport Parkway)	$76,128	$76,128	N/A

Appendix B - Project List By Priority

Water Resources Stewardship Capital Projects in Order of Priority

FUNDED

FY20 Priority	Name	Total Project Value ($K)	Remaining Cost ($K) (FY-20 to Completion)	Phase
	Mitigation (All Mitigation projects are required per CEQA or other Regulation and therefore do not receive a score)			
N/A	SMP Mitigation, Stream and Watershed Land Preservation	$16,769	$876	Continuing
	Environmental Enhancement & Stewardship			
	Lower Peninsula Watershed			
77	Hale Creek Enhancement Pilot Study (D6)	$4,853	$3,644	Des
72	Stevens Creek Fish Passage Enhancement D4.x	$20,113	$19,263	FY21
	Guadalupe Watershed			
85	Almaden Lake Improvements (D4.1a)	$31,496	$27,017	Des
	Coyote Watershed			
78	Watershed Habitat Enhancement Design & Construction	$62,270	$62,270	FY21
	Multiple Watersheds			
80	SCW Fish Passage Improvements (D4.3; Bolsa, Evelyn, Singleton)	$5,328	$2,356	Des/Const
75	SCW Implementation Fund	$3,529	$3,529	Plng
74	Ogier Ponds Separation from Coyote Creek (D4.1b)	$3,198	$2,698	Planning
50	Salt Ponds A5-11 Restoration	$12,112	$7,624	Design
	Feasibility Studies			
N/A	Watershed Habitat Enhancement Studies	$2,293	$523	Feasibility

VALIDATED - UNFUNDED FUTURE PROJECTS

None

Appendix B - Project List By Priority

Buildings and Grounds Capital Projects in Order of Priority

FUNDED

FY20 Priority	Name	Total Project Value ($K)	Remaining Cost ($K) (FY-20 to Completion)	Phase
73	Facility Management, Small Capital Improvements	$37,918	$35,418	Continuing
65	Headquarters Operations Building	$15,808	$15,808	On Hold

VALIDATED - UNFUNDED FUTURE PROJECTS

70	Fleet and Facility Annex Improvements	$4,719	$4,719	N/A

Information Technology Capital Projects in Order of Priority

FUNDED

FY20 Priority	Name	Total Project Value ($K)	Remaining Cost ($K) (FY-19 to Completion)	Phase
63	ERP System Implementation	$18,670	$10,043	Construction
56	E-Discovery Management System	$545	$24	Construction
54	Software Upgrades & Enhancements	$17,574	$15,171	Des/Const
46	IT Disaster Recovery	$2,495	$2,232	Construction
46	WTP-WQL Network Equipment	$12,351	$9,628	Construction
42	Telephone System Voiceover IP	$1,252	$1,252	Plng/Des/Const
34	Data Consolidation	$1,239	$1,099	Construction
34	Capital Construction Management System	$1,084	$1,084	Plng/Des/Const

VALIDATED - UNFUNDED FUTURE PROJECTS

None

Appendix C - District Partnership Summary

Partnership Reimbursements are funds that are reimbursed by the District's partners after the District advances the needed funds. The following table identifies capital projects that are funded cooperatively with the District's partners through reimbursements.

Partnership Reimbursement

FY 2020-34 Planned Capital Reimbursement Schedule

.			Claims	Actuals							
Project Number	Project Name	Agency	On-hand (12/18/18)	Thru FY18	FY19	FY20	FY21	FY22	FY23	Future	Total
91214010	Small Capital Improvements, San Felipe - Rch 1	Total	0	1,823	492	638	1,258	790	759	8,049	13,809
		San Benito Water Dist		1,823	492	638	1,258	790	759	8,049	13,809
91954002	Pacheco Reservoir Expansion Project	Total	0	0	3,775	8,550	8,100	3,775	7,249	453,101	484,550
		California Water Commission		0	3,775	8,550	8,100	3,775	7,249	453,101	484,550
92144001	Pacheco/Santa Clara Conduit ROW Acquisition	Total	0	19	35	297	348	67	0	0	766
		San Benito Water Dist		19	35	297	348	67		0	766
92374005	SCADA Remote Architecture & Comm. Upg	Total	0	0	76	136	64	66	216	996	1,554
		San Benito Water Dist		0	76	136	64	66	216	996	1,554
91094007s	South County Recycled Water Pipeline	Total	0	2,106	0	2,000	2,000	0	0	0	6,106
		SCRWA		811						0	811
		USBR - ARRA		1,295						0	1,295
		USBR - Title 16		0		2,000	2,000			0	4,000
26154001s	Guadalupe River–Upper, I-280 - Blossom Hill Rd.	Total	751	19,576	0	3,548	3,548	3,548	3,548	0	33,768
		State Subventions		14,985		3,548	3,548	3,548	3,548	0	29,177
		City of San Jose	751	4,591						0	4,591
26174041s	Berryessa Ck, Calaveras Bvd to I-680	Total	0	7,292	2,164	4,928	0	0	0	0	14,384
		State Subventions		0	826	3,558				0	4,384
		DWR - Prop 1E		7,292	1,338	1,370				0	10,000
40174004	Berryessa Ck, Lwr Penitencia Ck - Calaveras Blvd.	Total	0	8,504	1,600	4,977	0	0	0	0	15,081
		DWR - Prop 1E		8,504	1,600	4,977				0	15,081
40264011	Cunningham Flood Detention Certification	Total	0	0	5,300	0	0	0	0	0	5,300
		DWR - Prop 1E		0	1,000					0	1,000
		NRCS			4,300						4,300
40334005	Lwr Penitencia Ck Imp, Berryessa to Coyote Cks.	Total	0	5,000	0	0	0	0	0	0	5,000
		DWR - Prop 1E		5,000						0	5,000
40264008s	Lwr Silver Ck, I-680 to Cunningham, Rchs 4-6	Total	0	49,622	371	0	3,423	0	0	0	53,416
		State Subventions		7,593	371		776			0	8,740
		DWR - Prop 1E		21,353			2,647			0	24,000
		NRCS-ARRA		20,676						0	20,676
50284010	Llagas Ck–Lwr, Capacity Restoration	Total	0	120	0	0	1,000	0	0	0	1,120
		State Subventions		120			1,000			0	1,120
26174051s	Llagas Creek–Upr, Buena Vista to Wright	Total	0	14,530	5,200	5,000	9,180	6,331	0	0	40,241
		State Subventions		11,189	5,200	5,000	9,180	6,331		0	36,900
		City of Morgan Hill		3,341						0	3,341
26244001	Permanente Creek, SF Bay to Foothill Expway	Total		641	382	0	0	0	0	0	1,023
		City of Mountain View		641	382					0	1,023
10284007s	San Francisquito Creek, SF Bay - Searsville Dam	Total		3,087	1,433	960	0	0	0	0	5,480
		JPA Member Agencies		3,087	1,433					0	4,520
		JPA (Joint Powers Authority)				960					960
26444001	San Francisco Bay Shoreline	Total		0	4,439	0	0	0	0	0	4,439
		SFBRA Measure AA		0	4,439						4,439
00044026	San Francisco Bay Shoreline	Total		0	0	2,309	17,521	4,132	25,547	7,517	57,026
		SFBRA Measure AA		0		2,309	17,521	4,132	25,547	7,517	57,026
		SUBTOTAL - Reimbursements from Current Projects	763	112,965	25,267	33,343	46,442	18,709	37,319	469,663	743,063

Partnership Reimbursement (cont'd)

Pending Reimbursements for Closed Projects			Claims	Actuals							
Project Number	Project Name	Agency	On-hand (01/14/18)	Thru FY18	FY19	FY20	FY21	FY22	FY23	Future	Total
91214001	Pacheco Conduit Inspection & Rehabilitation	Total	12	1,286	1,046	235	0	0	0	0	2,567
		San Benito Water Dist	12	1,298	1,046	235				0	2,579
91244001	Wolfe Road Recycled Water Pipeline	Total	0	12,201	0	0	0	0	0	0	12,201
		Apple Computer		4,800						0	4,800
		Cal Water		1,500						0	1,500
		City of Sunnyvale		2,101						0	2,101
		DWR - Prop 84		3,800						0	3,800
94384002	Penitencia Delivery Main Seismic Retrofit	Total	0	3,897	19	0	0	0	0	0	3,916
		Department of Water Resources (A3904)		3,897	19					0	3,916
92224001	Penitencia Force Main Seismic Retrofit	Total	0	4,964	37	0	0	0	0	0	5,001
		Department of Water Resources (A3904)		4,964	37					0	5,001
91184008	Silicon Valley Advanced Water Purification Ctr	Total	0	22,046	0	0	0	0	0	0	22,046
		City of San Jose		8,500						0	8,500
		DWR - Prop 50		2,935						0	2,935
		DWR - Prop 84		2,486						0	2,486
		USBR - ARRA		8,125						0	8,125
30154013s	Guadalupe River–DT, I-880 to I-280	Total	0	39,480	110	0	0	0	0	0	39,590
		State Subventions		27,618	110					0	27,728
		City of San Jose		1,654						0	1,654
		San Jose Redev Agency		10,208						0	10,208
		SUBTOTAL - Reimbursements for Closed Projects	0	83,874	1,212	235	0	0	0	0	85,321
		TOTAL REIMBURSEMENTS	763	196,839	26,479	33,578	46,442	18,709	37,319	469,663	828,384

Appendix C - District Partnership Summary

Partnership Funding is funds that are made available by the District's partners, when needed. The following table identifies capital projects that receive partnership funding. This may occur through either cost sharing agreements or as in-kind services.

Partnership Funding

Project Number	Project Name	Amount ($K)	Partnering Agency
26174041s	Berryessa Creek, Calaveras Boulevard to Interstate 680	13,600	U.S. Army Corps of Engineers
26154001s	Guadalupe River–Upper, Interstate 280 to Blossom Hill Road	188,000	U.S. Army Corps of Engineers
26174051s	Llagas Creek–Upper, Buena Vista Road to Wright Avenue	65,000	U.S. Army Corps of Engineers
00044026s	San Francisco Bay Shoreline	91,250	USACE, Coastal Conservancy, US Fish & Wildlife, CA Wildlife Conservation, Packard-Hewlett-Goldman-Moore Foundations
10284007s	San Francisquito Creek, SF Bay thru Searsville Dam	3,000	U.S. Army Corps of Engineers
10284007s	San Francisquito Creek, SF Bay thru Searsville Dam	11,040	San Francisquito Joint Powers Authority (DWR)
10284007s	San Francisquito Creek, SF Bay thru Searsville Dam	1,500	County of San Mateo
40324003s	Upper Penitencia Creek, Coyote Creek to Dorel Drive	102,720	U.S. Army Corps of Engineers
	TOTAL	$ 476,110	

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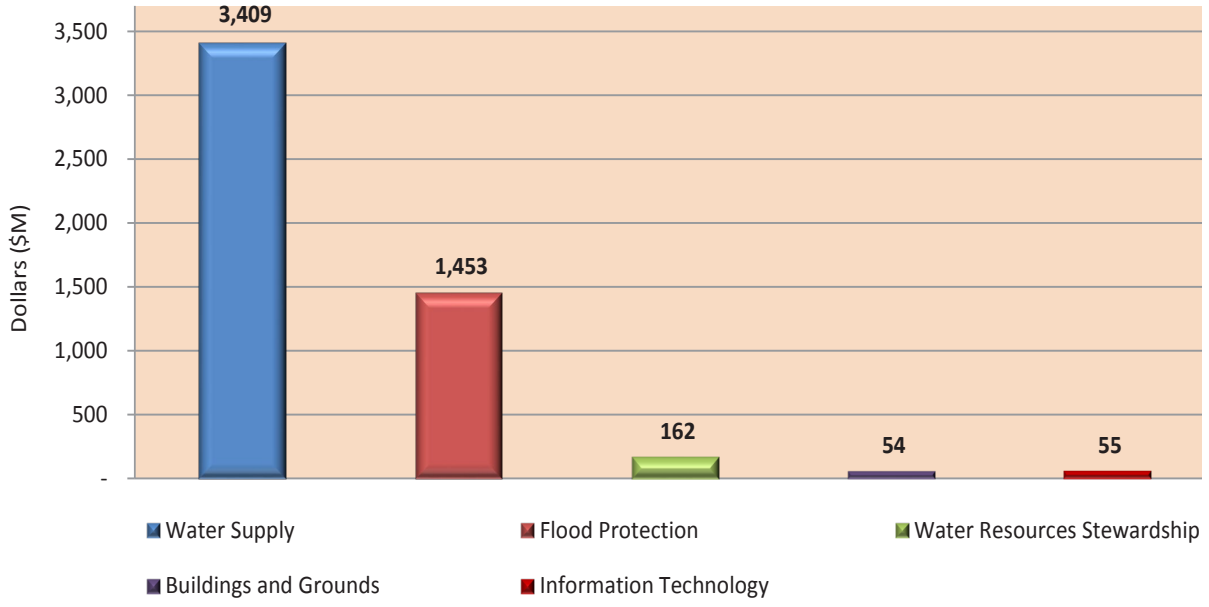
Appendix D - Summary of Capital Expenditures

Expenditure Schedule by Type of Improvement ($K)

	THRU FY18 (Actuals)	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30-34	TOTAL
Water Supply	388,252	107,838	137,687	174,645	270,232	215,080	404,421	404,800	506,870	355,130	292,831	63,758	87,954	3,409,498
Flood Protection	655,493	131,902	87,436	126,519	102,482	90,610	35,563	15,875	29,439	28,741	38,991	33,725	76,246	1,453,022
Water Resources Stewardship	27,188	4,973	10,276	15,036	22,676	19,742	19,820	27,808	14,442	-	-	-	-	161,961
Buildings and Grounds	-	2,500	2,063	6,384	8,969	7,028	2,327	2,399	2,473	2,549	2,628	2,709	11,697	53,726
Information Technology	7,482	7,195	10,055	7,470	588	3,775	4,484	1,340	905	703	5,998	582	4,633	55,210
TOTAL	1,078,415	254,408	247,517	330,054	404,947	336,235	466,615	452,222	554,129	387,123	340,448	100,774	180,530	5,133,417

CIP Expenditures by Type of Improvement

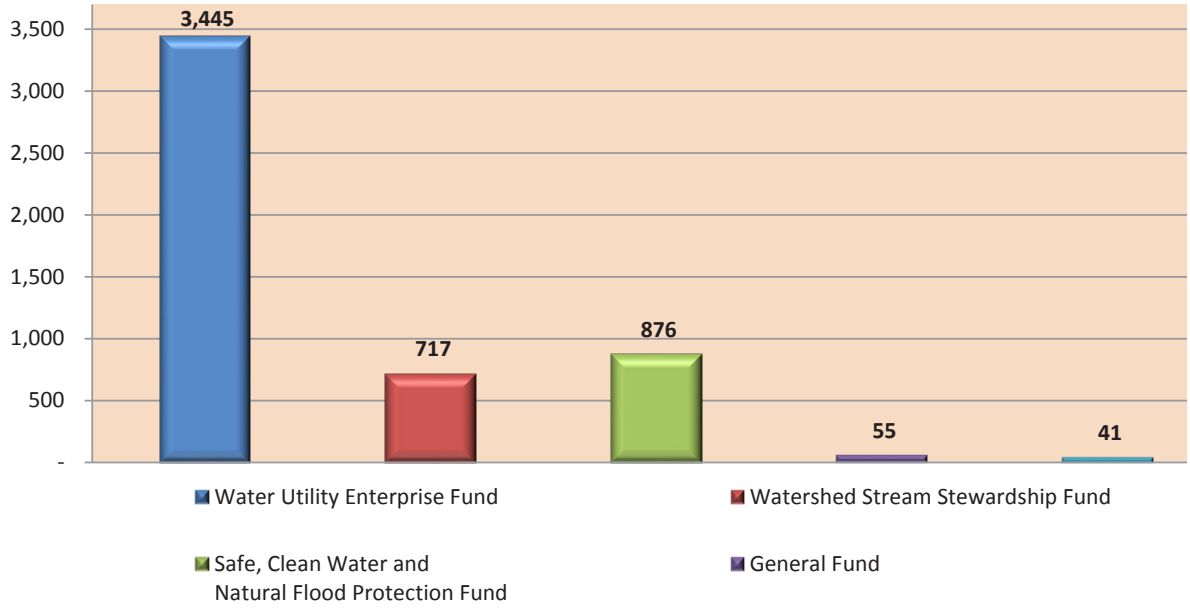


Appendix D - Summary of Capital Expenditures

Expenditure Schedule by Fund ($K)

	THRU FY18 (Actuals)	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30-34	TOTAL
Water Utility Enterprise Fund	373,390	108,054	137,469	175,855	271,887	217,685	421,031	423,056	513,398	355,278	294,365	64,340	89,273	3,445,081
Watershed Stream Stewardship Fund	307,118	52,052	34,117	41,237	22,492	37,163	28,546	18,273	18,746	12,888	34,105	33,725	76,246	716,709
Safe, Clean Water and Natural Flood Protection Fund	391,100	86,094	65,081	99,108	101,108	72,103	13,288	8,025	18,920	15,853	4,886	-	-	875,566
General Fund	1,648	2,612	2,063	6,384	8,969	7,028	2,327	2,399	2,473	2,549	2,628	2,709	11,697	55,486
Information Technology	5,159	5,596	8,787	7,470	491	2,256	1,423	469	592	555	4,464	-	3,314	40,576
TOTAL	1,078,415	254,408	247,517	330,054	404,947	336,235	466,615	452,222	554,129	387,123	340,448	100,774	180,530	5,133,417

CIP Expenditures by Fund



Appendix E - Safe Clean Water Project Schedules

The following tabel is an overview schedule for safe, clean water capital projects identified in the FY 2020-24 CIP. Detailed information for each project can be found in this document in their respective chapters in the order presented in this table.

Safe, Clean Water Capital Improvement Project Schedules

Project Number	PROJECT NAME	FY00 - FY04	FY05 - FY09	FY10 - FY14	FY15 - FY19	FY20 - FY24	FY25 - FY29
	WATER SUPPLY						
91864005	Anderson Dam Seismic Retrofit (C1)						
26764001	IRP2 Additional Line Valves (A3)						
26564001	Main & Madrone Pipelines Restoration (A1)						
	FLOOD PROTECTION						
26244001	Permanente Creek, SF Bay to Foothill Expressway						
26284001	San Francisquito Creek, SF Bay thru Searsville Dam (E5)						
26284002	San Francisquito Creek - Construction, SF Bay to Middlefield Road (E5)						
26074002	Sunnyvale East and West Channels						
26154001	Guadalupe Rv–Upper, Fish Passage Mods						
26154002	Guadalupe Rv–Upper, I-280 to SPRR (R6)						
26154003	Guadalupe Rv–Upper, SPRR-Blossom Hill (R7-12)						
26204001	Los Gatos Creek Restoration & Flood Protection						
26174041	Berryessa Ck, Calaveras-I-680 - Corps						
26174042	Berryessa Ck, Calaveras-I-680 - Reimbursable						
26174043	Coyote Creek, Montague Expressway to Interstate 280						
26324001	Upper Penitencia Ck, Coyote Ck-Dorel Dr, Corps (E4)						
26174051	Llagas Creek–Upper, Reimbursable (E6b)						
26174052	Llagas Creek–Upper, Corps Coordination (E6a)						
26174053	Llagas Creek–Upper, Technical Studies						
26174054	Llagas Creek–Upper, Design						
00044026	San Francisco Bay Shoreline						
62044042	Shoreline Early Implementation						
26444001	San Francisco Bay Shoreline - EIA 11 Design & Partial Construction (E7)						
26444002	San Francisco Bay Shoreline - Other EIAs Planning (E7)						
	WATER RESOURCES STEWARDSHIP						
26044001	Almaden Lake Improvements (D4.1a)						
26164001	Hale Creek Enhancement Pilot Study (D6)						
26044002	SCW Fish Passage Improvements (D4.3; Bolsa Road)						
26044003	SCW Ogier Ponds Separation (D4.1b)						
26444003	South Bay Salt Ponds Restoration (D8)						

Legend

- Planning Phase
- Design Phase
- Construction Phase
- Close-out Phase

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Appendix F - Glossary

Ad Valorem Tax
A tax based on value (e.g., a property tax).

Appropriation
An appropriation is a legal authorization granted by the Santa Clara County Board of Supervisors which allows the District to expend cash and incur obligations for specific purposes. An appropriation is usually limited in amount and the time it may be expended.

Assessment
The process of setting the official valuation of property for taxation; the valuation placed upon property as a result of this process.

Asset
A probable future economic benefit obtained or controlled by a particular entity as a result of past transactions or events. Examples of assets are cash, receivables, and equipment.

Benefit Assessment
Determination of the benefits derived from District activities within particular watersheds and levying a proportionate share of taxes to each parcel subject to voter-approved limitations.

Bonds
Bonds are a long-term source of debt that provides a source of borrowed monies that can be used to pay for specific capital facilities. Bonds are a written promise to pay a specified sum of money at a predetermined date or dates in the future, called the maturity date(s), together with periodic interest at a specific rate.

Capital Expenditure
Capital expenditures fall into several categories. In general, they should create assets or extend the useful lives of existing assets. The work product results in a long-term benefit greater than two years and for budgeting purposes involved a major expenditure of district resources greater than $50,000. They can be made with regard to tangible and intangible assets.

The general categories of capital expenditures are: rehabilitation, major repairs, improvements/ betterments/ upgrades, replacements, expansions/ additions, and ancillary expenditures.

Capital Projects
Projects are budgeted within the Capital budget and fall within the definition of Capital Expenditures; which means they (1) create or extend the life of an asset, (2) their work products have a useful life of greater than two years, and (3) they involve an expenditure of District resources in excess of $50,000.

Certificates of Participation (COPs)
A security in the general form of a bond, which evidences a proportionate participation in a flow of lease or other payments between two parties.

CEQA California Environmental Quality Act

CIP Capital Improvement Program

Cost Center
Cost Centers are separate financial accounting centers in which costs are accumulated because of legal and accounting requirements, the first two digits of a project number identifies the cost center.

DPR Direct Potable Reuse

DWR State Department of Water Resources

EIR Environmental Impact Report

Encumbrances
Commitments related to unperformed (executory) contracts for goods or services. Encumbrances represent the estimated amount of expenditures that will result if unperformed contracts in process are completed.

Enterprise Fund
Enterprise Funds are used to account for operations including debt service (a) that are financed and operated in a manner similar to private business, where the intent of the government body is that the costs (expenses, including depreciation) of providing goods or services to the general public on a accounting basis is financed or recovered primarily though user charges;

or (b) where the governing body has determined that periodic determination of revenues earned, expenses incurred, and/or net income is appropriate for capital maintenance, public policy, management control accountability, or other purposes.

ERP Enterprise Resource Planning

Expenditure/Expense
Decreases in net financial resources. Expenditures include current operating expenses requiring the present or future of net current assets, debt service and capital outlays, and intergovernmental grants, entitlements, and shared revenues. The major expenditure categories used by the District are labor and overhead, land and structures, equipment, and debt service.

Facility
Defined as a creek, reservoir, dam, water treatment plant, pipeline, canal, etc.

Fixed Assets
Fixed Assets are defined as long-lived tangible assets such as automobiles, computers and software, furniture, communications equipment, hydrologic equipment, office equipment, and other equipment, with a value of $2,000 or more, or the combined value of like or related units (aggregate value) is greater than $5,000 if the unit value is less than $2,000.

Fiscal Year
A 12-month period to which the annual operating budget applies and at the end of which a government determines its financial position and the results of its operations. The District's fiscal year is July 1 through June 30.

Fund
A fiscal and accounting entity with a self-balancing set of accounts in which cash and other financial resources, all related liabilities and residual equities, or balances, and changes therein, are recorded and segregated to carry on specific activities or attain certain objectives in accordance with special regulations, restrictions or limitations.

General Fund
A fund used to account for major operating revenues and expenditures, except for those financial transactions that are required to be accounted for in another fund. General Fund revenues are derived primarily from property and other taxes.

Grants
Contributions or gifts of cash or other assets from another government entity to be used or expended for a specified purpose, activity, or facility.

HVAC Heating, Ventilation, and Air Conditioning

IPR Indirect Potable Reuse

JPA Joint Power Authority

KPI
Each project under the Safe, Clean Water Program has Key Performance Indicators (KPIs) that define the deliverables that are Valley Water's commitment to the voters. Safe, Clean Water Projects may have multiple KPIs and each KPI may result in separate or multiple projects within the Capital Improvement Program.

Levy
(1. Verb) To impose taxes, special assessments, or service charges for the support of government activities; (2. Noun) The total amount of taxes, special assessments, or service charges imposed by a government agency.

Long-Term Debt
Debt with a maturity date of more than one year after the date of issuance.

MGD Million Gallons per Day

One Percent Flood or 100 Year Flood
Has a 1% chance of occuring in a given year. Water District projects are usually designed for the 1% flood, a national standard established by the Federal Emergency Management Agency (FEMA).

Appendix F - Glossary

Operating Expenditure

Operating expenditures are system costs required for the daily process of providing water and watershed management services, including the administrative and overhead costs to support these services.

Operating expenditures are costs necessary to maintain the systems in good operating condition. This includes the repair and replacement of minor property components. The American Waterworks Association (AWWA) says that these priority components should be smaller than a retirement unit; a retirement unit is a readily separable and separately useful item that is part of a larger assembly. The benefit and life of such repairs should be less than two years. Any repairs that recur on an annual basis are considered operating activities of a maintenance nature.

Operating expenditures are often separated into fixed and variable costs for purposes of understanding operating leverage and structuring service charge rates.

Operations

Expenditures required for the daily process of providing water and watershed management services, including the administrative and overhead costs to support these services. Operations include work that is generally of an ongoing or recurring nature. Any District work that is not a project is, by definition, an Operation. Operations, although recurring, require close coordination and a high degree of management oversight; however, they can be accomplished without the application of the full range of tools and processes used for managing projects.

P3 Public Private Partnership

Projects

At the Santa Clara Valley Water District, a project is any undertaking which has (1) a beginning and an ending, (2) a one-time occurrence. Projects can require expenditure of capital or operating funds and, at the District, are called Capital or Operating Projects, accordingly. Project usually, but no always, relate to a District facility or facilities (a creek, a reservoir, a dam, a water treatment plant, a pipeline,, etc.). Projects may include studies, design, construction, maintenance, or implementation of systems such as Records Management or Financial Management System.

Revenue

Monies the District receives in exchange for services or sales provided. Revenue items include water sales, property tax revenues, benefit assessment revenues, interest income, intergovernmental reimbursement, and other.

Revenue Bonds

Bonds, whose principal and interest are payable exclusively from earnings of an enterprise fund. In addition to a pledge of revenues, such bonds sometimes contain a mortgage on the enterprise fund's property.

Reserve

An account used to indicate that a portion of a fund's assets are legally restricted for a specific purpose and is, therefore, not available for general appropriation.

SCW

The Safe, Clean Water and Natural Flood Protection Program (Safe, Clean Water Program) is a countywide special parcel tax that was approved by voters on November 6, 2012 as a replacement to the Clean, Safe Creeks and Natural Flood Protection Plan. This Program combines the main operational areas of the District in water supply, flood protection and stewardship, and represents an integrated approach to addressing community priorities. The 15-year Program became effective on July 1, 2013 and has a sunset date of June 30, 2028.

WTP Water Treatment Plant

WQL Water Quality Lab

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Valley Water

Clean Water • Healthy Environment • Flood Protection

Santa Clara Valley Water District
5750 Almaden Expressway, San José, CA 95118-3686
Phone: (408) 265-2600 Fax: (408) 266-0271
www.valleywater.org

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